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A STATEMENT OF OBJECTIVES OF THE AMERICAN ACCOUNTING ASSOCIATION

AT THE *twentieth annual meeting of the* American Association of University Instructors in Accounting, *the members present voted unanimously to adopt the name,* American Accounting Association, *and to broaden the purposes and activities of the organization: an action long contemplated and since ratified by an affirmative mail vote of more than two-thirds of the membership.*

The official purposes of the reconstituted association are:

1. To encourage and sponsor research in accounting and to publish or aid in the publication of the results of research.

2. To develop accounting principles and standards, and to seek their endorsement or adoption by business enterprises, public and private accountants, and governmental bodies.

3. To promote studies of accounting as an agency of control of business enterprise and economic affairs in general.

4. To improve methods of instruction and to demonstrate the social benefits of a more widespread knowledge of accounting.

Since January 1, 1936, the executive committee, governing body of the association, has met twice. It has formulated jointly the following statement of objectives in order to clarify its own outlook and to indicate to members and others the proposed fields of activity for the coming year. It has already approved and taken steps to launch studies covering projects numbered 1, 2, and 6 on page 3, and is also proceeding with studies of corporate surplus, stock dividends, and depreciation.

Accounting, originally designed for the purpose of providing internal control of business affairs by private owners, now finds itself faced with the responsibility of compiling and expressing the results of business operations in a way which will meet the needs of investors, governmental units, and the public at large, as well as those of the immediate management. The mechanism of private accounting must be adapted to serve these broad social and economic purposes.

The best means of making this adaptation are not yet entirely clear. After a quarter-century and more of active discussion and experimentation in this country, many of the simplest and most fundamental problems of accounting remain without an accepted solution. There is still no authoritative statement of essential principles available on which accounting records and statements may be based.

In such a situation public accountants, on whom the burden of discharging the new obligations has largely fallen, have had an almost impossible task. They have been asked to certify to the correctness and adequacy of accounting statements, when no satisfactory criteria of correctness and adequacy have been agreed to. Under the difficult and unfavorable conditions which they have faced, the persistent struggle for honesty, fairness, and candor which has characterized public-accounting work, is evidence of the high character of the profession, and of the integrity and devotion of its members.

The accountant should no longer be kept in this anomalous position. It is impossible now to escape the social implications of

large-scale business enterprise. Its affairs are matters of public, as well as private, concern. Public accounting must, therefore, assume a full responsibility for the preparation of sound and informative reports on the operations of business, or await the time when the alternative of rigid governmental control of such matters will become an established fact.

To fulfill such a function, accountants can hardly limit themselves to comment on the statements prepared by business executives for their own purposes. It is essential that they develop and employ means of recording, measuring and interpreting the financial aspects of business transactions in accordance with principles and standards which shall be definite, meaningful, and widely applicable. Such principles and standards can be developed, and should be developed now.

Progress toward this goal has been retarded by the assumption on the part of some accountants and business men that the problem does not exist, or cannot be solved. It has been argued occasionally that there are no principles which should restrict the free use of any one of several plausible methods of determining values, profits, capital, etc.; that everyone should be permitted to adopt a set of accounting principles for his own affairs, and even to employ different principles at different times. It has been wrongly inferred that a reference to basic principles which should be controlling in all situations is a demand for uniform accounting methods, forms, and records. This, of course, may be impractical and unnecessary.

A more serious obstacle is the conscientious belief of many prominent and able accountants that the only practicable means of improvement is the slow, evolutionary process involving persuasion and example through which the worst accounting practices may be gradually eliminated. Secure in the consciousness of right intent, these individuals advocate moving cautiously toward any change in position on controversial issues, unaccompanied by any vigorous or positive enunciation of articles of faith. They are encouraged in this attitude by many business men, financiers, and promoters, who find reason to discourage the publication of comprehensive and comprehensible statements of business affairs.

Progress is usually slow, and caution admirable. There should be, however, some clear objective and some program for reaching it, if accounting is to be sure that it is actually making any progress at all. It is time that accountants, after many years of raising questions, should begin to furnish answers.

Specifically, there should be a definitive, understandable explanation of what a set of accounting statements purports to signify. A balance sheet or an income statement cannot tell everything, but it should furnish significant information and, as nearly as may be, the same type of data every time. When a critic is asked to examine such a statement he should be able to say that it does (or does not) conform to some consistent body of principles, which can be expressed in clear, unequivocal language, intelligible to the layman of sound mentality and substantial acquaintance with business affairs. If accountants are to speak only to accountants it seems hardly necessary that they speak at all.

Such a body of principles would furnish an essential basis of judgment in constructing and appraising financial statements. The principles accepted would not need to be restrictive, except in the sense that any proper practice restricts departures from it. They need make no demand for a rigid "uniformity" of accounting classifications and procedures, so much abhorred; they should permit wide latitude in the application of individual accounting policies and practices. They should deal more with fundamental methods of expressing accounting facts than with the extent of "disclosures" in published statements, a means by which some accountants now seek to avoid criticism where questions of principle are in controversy. As a whole, they should constitute simply an explanation by accountants of what they are attempting to tell when they set forth a statement of financial position and of results of operations of a business enterprise.

A complete statement of these necessary fundamental principles could hardly be developed overnight. In some part, however, they are already established, and as to other questions there is at least a recognition of the problem to be solved. In public accounting offices, in regulatory bodies, and among accounting teachers and research workers there has been sufficient discussion and agitation of many of the basic questions so that their nature is well understood. Possibly the situation requires no more than an effective sympathetic agent to produce out of the confusion of accounting controversy the clear crystals of principle which may serve as the foundation.

It may be difficult to bring about an agreement as to what constitutes the only sound principle in any given case. It should not be difficult, however, to indicate in a general way the scope of the problem. This can be done best, perhaps, by stating a group of principles which *might* be adopted as fundamental to sound accounting.

The essential of such a statement is that it constitute an integrated conception of the function of accounting as a means of giving financial expression to business facts. It must inevitably embody some conflict with existing accounting practice, since existing practice is in conflict with itself at a hundred points. It should avoid, as far as possible, outright conflict with existing law, though it need not condone as good accounting everything that legislatures and courts have made valid law. Finally it must represent a practical tool of business and finance, meeting the legitimate needs of managers, bankers, investors, the government, and the public at large.

A preliminary statement of principles, designed to meet these requirements, is now in preparation. It will appear in an early issue of the ACCOUNTING REVIEW. This statement should provide at least an adequate basis for discussion, and should lead to some clarification of the meaning of accounting statements.

It must be recognized, however, that simple statements of basic principle at best will fall short of covering the numerous problems which arise in their application to particular situations. The American Accounting Association expects, therefore, to encourage intensive research work on the many controversial questions of accounting theory which arise and must be met in attempting to express the facts of modern business enterprise. The following list is suggestive of projects which call for study and on which the association will sponsor immediate research:

(1) Fundamental concepts and propositions in accounting theory

(2) Presentation of financial statements: the proper organization, content, and detail of published corporate reports

(3) Accounting treatment of corporate capital accounts, including—
- (a) Capital and paid-in surplus
- (b) Earned surplus
- (c) Revaluation surplus
- (d) Treasury stock
- (e) Dividends
- (f) Stock dividends and other capital and surplus adjustments
- (g) Premium and discount in refinancing and reorganization

(4) Measurement of income, including—
- (a) Bases of income realization
- (b) Bases of cost capitalization and amortization
- (c) Allocation of income between accounting periods; stablization of income
- (d) Operating and nonoperating income; capital gains and losses
- (e) Common costs in relation to revenues
- (f) Depreciation and depletion in relation to income

(5) Problems of valuation, with special reference to financial statements, including—
- (a) Costs
- (b) Inventories
- (c) Investments
- (d) Intangibles
- (e) Organization and development costs; carrying charges
- (f) Depreciation; retirement versus accrual
- (g) Effect of changing price levels; write-ups and write-downs

(6) Consolidated statements: outline and uses, with particular attention to controversial questions involved in their preparation

These topics, and related subjects which might be added to the list, merit intensive study because of their importance and because of the complete lack of uniformity and agreement which characterizes their treatment by accountants and business managements at the present time: a condition arising less from the peculiar circumstances of the individual case than from the absence of comprehensive underlying theories by which an accounting procedure may be tested.

It is hoped that research under competent sponsorship will result in the development of a body of broad accounting concepts and propositions which may prove valid and useful in accounting practice.

THEORIES OF COST

WILLIAM MORSE COLE

A GREAT MANY years ago when I was trying to teach something of the art of writing to some young people, I told them that definition was about the most difficult exercise of the human brain. When, some years later, Dr. Marshall asked a number of people for a definition of depreciation, my former opinion of the art of definition was confirmed, for my own definition comprised three full typewritten pages, in the form of a single sentence, and I found that I could not reduce it without including in depreciation something that it isn't or omitting something that it is.

I shall be careful this morning, therefore, to avoid any attempt to define "costs." Exposition is an easier art than definition. My job, I understand, is less to tell what I mean by "cost" than to attempt to state what seem to me the basic ideas on which the various theories of cost have been founded. A little examination shows that there must be differences, else not so much difference would occur in the calculation of costs.

On the face of it, nothing seems simpler, at least in theory, than knowing what is the cost of anything. Given the elements entering into a thing, its cost, financially expressed, is but the sum of those elements, each financially expressed. So much for the theory. When we come to the practical test, as we all very well know, we find that the elements entering into the cost of a thing are not usually given, but have to be learned by analysis, often by almost impossibly finespun reasoning, and, even in the cases in which the elements are given, a philosophical basis must be found for applying those elements to the case in hand. Let me illustrate this briefly. If an article is produced by a machine run by an operator, we can't know what the article cost until we know what the operation of the machine cost. Learning that involves an investigation into a host of subsidiary costs—like insurance, rent, taxes, fuel, engine-room wages, etc.; and some of these elements of cost in but *one* of the final elements of cost involve in their turn several other analyses of cost into new elements—which in their turn may involve others. Yet if we had all these given we should still need a basic theory of cost before we could arrive at our final figure—unless, indeed, our case happens to be unusually simple. We must decide, for instance, whether the figure of cost that we are constructing shall include a recognition of the fact that the machine is not run all the time, and yet part of its cost is involved in the mere passage or time, whether it is in use or not—like insurance, taxes, and obsolescence. Is cost for the machine when not engaged on any job a recognizable part of the cost of the jobs which it ultimately serves? The apparent answer is "no"; but we cannot be so sure when we realize that insurance, taxes, obsolescence, etc., are inescapable if the machine is in the shop at all, and if it is there to serve jobs adapted to it, its costs seem to be their costs.

This brings us at once to a basic principle —one that seems to me too often neglected— that there is no such thing as an abstract cost, a *mere* cost. A cost is always the cost *of* something. If it isn't the cost of *something*, it isn't a cost at all. In other words, the accountant's task is as much to learn *of what*

things are costs as to learn what the costs are. It is absurd, or worse, to try to allocate costs until one has learned just what the costs have accomplished.

When, then, in the case that I have just used for illustration, we say that the idle-time costs of the machine (those costs that go on with the mere passage of time, like insurance, taxes, and obsolescence, independently of use) are not a part of the cost of the product that involves its use, we are left with the inevitable query, "What are they a cost of?" For, we must remember, every cost is a cost of *something*.

Your answer will depend on your *basic* theory of cost. Perhaps you will say that such items are not a cost at all, but a loss, as some able accountants do. That interpretation has the advantage of escaping the inevitable query cited above; but it seems to me to be largely begging the question by falling back in effect on single entry. To my mind, the advantage of double entry as compared with single is largely that it asks that inevitable question, "What is it a cost of?" As I said before, there is no abstract, mere, cost: it is always the cost *of* something. Double entry insists on knowing, or at least putting down, something. Single entry, at least in its pure form, merely registers the outgo without necessarily registering the result—as if outgo were cast into the sea and income came like manna from heaven, without any traceable relation between them.

With this introduction, we can turn to the basic ideas behind some theories of cost.

The first, most obvious, difficulty in finding costs is due to the fact that many productive agencies carry their usefulness through more than one accounting period. I have already suggested one case of that sort. The cost of carrying a machine in idleness, whether that idleness is a matter of hours, months, or years, under any worthy system of accounting must be recognized somewhere. If we could wait until the machine were scrapped before accounting for its costs, all would be easy (at least comparatively), for we could allocate all its cost to all its product, and no residue would bother us. We can't do that. We can't wait so long. We must currently learn the cost of specific products as a guide to management. So we force ourselves to a current figure. Our idle time, moreover, varies from week to week, from month to month, from year to year. Is the cost of idleness in a dull month, say June, a charge against the production of June, so that all June product has a high unit cost, while January, perhaps a busy month, has a low idle-time cost and hence a low charge and a low unit cost; or shall we use an estimated average idle-time cost for all the months and allocate it impartially to the product of all the months? This latter, of course, may be done indirectly, by neglect, by simply dividing the total carrying charges of the machine for the year by the number of estimated hours of use, and applying that as a minimum charge per hour against all product. That neglects all accounting for the cost of idle time as such, and works as if the year had in it only as many hours as the machine has hours of use; as if the machine were wished out of existence when not in use, and wished back when needed. Or, as already indicated, we can say that the cost of idle time is not a cost of any product, but a cost of doing business generally, like advertising. Or we may say that it is only a loss.

What basic theory of cost underlies each of these treatments? The first, charging the cost of each month's idle time to the product of that month, *assumes* that the machine was carried in that month for the product of that month. Of course, in a sense it was; and the accounting is in that sense good.

The second, distributing the year's estimated idle time over the product of the year (of course presuming that adjustment is made for any error in the estimate) *assumes* that the machine was carried *through* the year for the benefit of *all* the product of the year. That sounds more reasonable than the other assumption, but as a practical matter may leave large adjustments to be made—when it is too late to apply them to some product that has already gone into history.

This method is superior to that of distributing idle-time cost through what I have called "neglect" above, in that it shows on the books idle time as such, as a specific statistical figure, rather than leaving it lost in the shuffle.

The fourth, treating such cost as a general cost of the business, *assumes* that the business could not be well carried on without this kind of handicap; as if the machine when idle contributes nothing to any particular product and its carrying charges are incurred in order to enable the business to stand ready to do the work for which this machine is adapted.

Lastly, to treat carrying charges for a machine not as cost but as loss seems to me either to confess bad management or to *assume* that these charges are both unpredictable and unavoidable; for it they are predictable good business management should provide a shock absorber to take them up; and if they are avoidable the cost should not occur. To put this in another way, if the charge is either predictable or avoidable it is incurred for *a purpose*, and it is a *cost* of carrying out that purpose, i.e., a cost of something recognizable in the accounts, and not a mere contribution to the limbo of disappeared assets.

This illustration is of course but one of many involving costs connected with an asset serving its function over a period longer than the immediate accounting need. Yet it is in some ways the simplest of them all; for here we are concerned with the task of distributing a *current* cost over *current* product. We have constantly, and in vastly greater complication, the task of distributing long-lived costs over current production.

I have already, you may have noticed, incorporated in some of the above allocations of the cost of idle time one theory for the allocation of long-time cost, for I included obsolescence as one item of current cost to be distributed over product. I assumed a known cost for obsolescence. Yet we can't determine that without a theory of long-time cost. Is obsolescence so thoroughly due to the lapse of time that it is chargeable on the basis of time alone, irrespective of the volume of production? In all the alternatives that I suggested for disposing of idle time I was assuming an unchanging *rate* of obsolescence either allocated over the actual volume of product or not allocated at all. So in the alternative methods for distributing it I was combining two theories of cost: (1) that so far as the life of the machine is concerned the obsolescence is to be taken on the basis of time elapsed, but (2) so far as any one accounting period is concerned it is to be taken on the basis of volume of production. Of course we have still the possible theory that it should be taken for the *whole* life of the machine distributed over the *whole* volume of product. In that case, months of low production (relative to the average of *all* the months of its life) would have a low charge for idle time, and so on proportionally. Of course we have run into the practical difficulty that in order to distribute the obsolescence over all the product, we must know what that product is, and we can't know that until the end—too late. So, again, in order to do the thing at all we must use estimated product, and adjust as best we may.

That is not all, however. Who knows what is proper obsolescence to be taken currently? Who knows when any facility of production will be superseded? So again we are forced back into estimates. Does that mean that obsolescence is not a cost at all? The fact that we cannot know accurately what it is until the end does not affect the fact that the total obsolescence is incurred for the product, and the more nearly we estimate it in advance the more nearly our current costs will come to correctness.

We have still another decision to make, some more conflicting theories to face. Suppose we find it probable that when we come to replace our machine in the future, because the old one must be scrapped, the new one will cost more or less than the old—that is, for the same productive capacity, or after allowing for any increase or decrease. Is the obsolescence that must be counted as a cost of our product to be figured on the cost of the old machine, or on the expected cost of the new? Perhaps that is a matter that Professor Hatfield is going to discuss, and I wish to avoid trespass. My job is merely to point out that if you base obsolescence on original cost you are taking the view that cost is a matter of historical fact (or the best judgment that one can give to apparent facts). If you base obsolescence on probable cost of

replacement you are saying in effect that to be made whole in a business enterprise, one must be at the end as well situated for conducting future business as he was at the beginning. So this is looking to the future rather than to the facts of the past. Of course the fact is that when replacement costs less than the original purchase, capital is set free, because hereafter the same business can be conducted with smaller capital; and in case it costs more, more capital is needed.

We have been talking so far as if we know the primary costs—that is, as if we know the original cost of every element involved in our ultimate distribution of costs. Of course, so far as cash or equivalent outlay is concerned, the books show it, or should. Yet many costs are not so obvious. Some purchases are paid for by issues of bonds or stock. In the original transactions the securities have in the minds of everyone concerned some figure of value, for business people do not enter into transactions without expressing to themselves in financial form what they are to give and what they are to get. Is the cost of a going business purchased in exchange for a bond issue or a stock issue the figure that in the minds of the issuers those obligations are worth? Or is it the figure in the minds of the sellers? Or is it the market value of the securities—even when the market with respect to them has not found itself? We have been recently told by a government body, whose initials my mind has muddled, that the accounts should show the cost to the *original* holders. Here is the historical point of view with a vengeance. The accounts are those of the purchaser, but the figure to be used is the cost to someone else, who perhaps sold to a third party, who may have sold to another who sold to the present holder, and each purchase price may have been different from all the others.

Long ago the Interstate Commerce Commission ruled that interest on money borrowed for construction purposes should be deemed a part of the cost of construction, to the extent of the time involved. Not only that, but the resulting figure should be used on the balance sheet as an asset. This, of course, is on a basic assumption, viz., that all the normal socially necessary sacrifices involved in acquiring an asset and putting it into shape for production are costs of that asset and properly used on the balance sheet when that asset is ready for use. That theory seems to be rather widely accepted. If you use your own funds for such construction, however, that is—different? So we are told—though not by the Interstate Commerce Commission. We have been told it again and again. Then if one concern likes to show large assets, and another likes to show small costs, the first will borrow money and charge the interest as construction cost, even though it has funds of its own and lends them with a resulting other income on its income sheet, and the second will use its own funds for construction, charge nothing for interest, and show a lower figure on both its balance sheet and its income sheet. In essence the two situations are identical; but in the accounts one has a larger asset with a larger income to explain it. Then, if the cases are essentially the same, the second has a secret reserve.

Perhaps that is all to the good. I am not arguing the case: I am merely presenting it. When we come to manufacturing accounts, and wish to know from them whether certain expensive machinery is worth while, if we omit to allow interest on investment as a cost of the product, we are omitting from our calculation of cost one of the elements that we set out to measure the effect of. The basic assumption of this theory is, of course, that the use of our own funds costs us nothing. In other words, that use may reduce our costs and show increased profits indirectly—without showing whence they came.

Of course the defenders of this say that to include interest on capital as cost is to pad assets through inventories. In other words, in order to avoid padding the relatively small item of inventories, they omit to show the effect of using owned capital for the product already sold. Perhaps it is unnecessary to remark that reserves for unrealized interest could be set up if desired, so as to avoid that particular sort of padding, if it is padding.

We have just been speaking of inventories. Let's look at purchased merchandise on which discounts have been offered for early

payment. If goods are offered for 2%—30 ds., how should they be carried? Commonly we are told that if the gross price was paid, that is the cost; and if net is paid, the gross price is still the cost of the goods, with a gain of the discount taken. Occasionally we are told that in the latter case the net is the price of the goods. What is the basic theory behind using the gross as the price of the goods? It is that the *natural* time to pay for goods is long after delivery. Why should that be? Let's see what we find when we look below the surface. If a lot of goods billed at $1000 can be paid for in full by a check for $980, what are the goods *as goods* worth? Only $980, or a check for $980 would not be accepted in full payment. Then if $1000 was paid, the extra $20 must have been for something not merchandise. What? Compensation for delay in payment, including risk. That not only is not merchandise, but is something entirely unlike it. Whether the discount is availed of or not, the merchandise has a *cost* of the lower figure. If the discounts are taken, the net figure is the only *fact* in the whole transaction. The discount is not a profit—it is but the correction of the bill for an overcharge—billing for a service not rendered. If the discount is not taken, the forfeited discount is a charge for a service rendered by the seller—viz., extending credit.

It is interesting to observe that the theory that says that the cost of merchandise is the gross price, and a discount taken is a gain, is absolutely contradictory to that which refuses to treat interest on owned capital as a cost. Lest this be not obvious, let me summarize: the opponents of treating interest as a cost do so largely because (1) the interest is not an out-of-pocket item, and (2) including it pads the assets; but taking discounts is merely avoiding a charge for extending credit, and is not an in-pocket gain, and refusing to show forfeited discounts as a cost of credit rather than a cost of merchandise is to pad the inventory—as if the merchandise has a larger value because the credit of the business is poor.

I should like to take just one more kind of case. Manufacturing burden is so various, sometimes simple and sometimes very complex, that of course we have many schemes for accomplishing its distribution. I should like to remind you that any scheme that allocates burden on the basis of wages *assumes* that every dollar of wages is accompanied by the same burden cost for rent, light, power, superintendence, insurance, taxes, depreciation, maintenance, etc., etc., etc., as every other dollar of wages. How often is that true? Or how often is it true that a larger or smaller cost for one of these things is offset by a smaller or larger cost in another, in the same degree?

Again, any scheme that allocates burden on the basis of wages and materials combined *assumes* that every dollar of direct cost is accompanied by the same burden cost as every other dollar of direct cost. How often is that true?

When these assumptions are not met and still one of these methods is used, a new assumption must be made—that any false allocation of burden to one set of jobs will be sufficiently offset by a contrary false allocation to some other set, and the net discrepancy will be nil. If one is working under cost-plus contracts that may be all very well—for the contractor,—but if this results in large sales of the undercharged product, and small sales of the overcharged, all will not be so well.

An analysis of burden applying it on several different bases—as e.g., a machine-occupancy rate, a machine-use rate, a machine-idle-time rate, with supplementary rates for other factors, *assumes* that the relation between labor time, wages, raw material, and the various elements of burden is not constant throughout the enterprise, and that to produce a statement of true costs one must allocate them on different bases.

I fancy you are by this time thinking that I am giving you a most undigested mass of material—a hotchpotch. You are quite right. I am. It is not only undigested but indigestible. There are no widely accepted theories of cost that I can discover. In the indexes of very few books on accounting does the item "Cost, defined" appear, and in none did I notice "Cost, theory of." The word itself is protean. You may have noticed that

I have set one limit on my own use of it—I distinguish cost from loss: a cost must always be incurred, whether voluntarily or not, for a known end. That is why I say it is always the cost *of* something. A loss, as I conceive it, is not *for* anything. Its only offset is experience—which, however valuable, has no ledger standing. Even here, however, I find it hard to be consistent, for what is commonly called "Loss from bad debts" I consider a cost—the cost of doing business on a credit basis.

Can I at all summarize theories of cost? A little, perhaps, and in the time at my disposal very crudely and incompletely.

The first is obvious: its basis is historical fact analyzed as completely as shall be worth while. In the case of idle time that I have used for illustration today, for example, the accountant must learn whether the idleness is inherent in the situation, or is incidental. Historical correctness may require it to be treated as a cost, or as a loss, according to circumstances. One thing is sure: the historical basis will never mess up the accounts by changing the method from time to time because someone wishes to make a better showing.

The second basic theory makes the accounting subservient to policy. Under it the accounting department does not exercise an independent function, recording things as they look from an objective standpoint, but seeks to serve some other department of the business through accepting its point of view. I don't mean necessarily falsifying figures, but presenting them from the angle of that department. As an example of that, we are sometimes told by the manager of a department that he must meet his expenses out of his discounts taken. So he wishes his discounts to appear as gains. Of course the accounting department should serve other departments, and all of them—for what other use has it?—but it should beware lest department slants throw light and shade in the wrong places, distorting the picture. Always the figures that policy needs can be derived from the figures of fact if the figures of fact have been kept uncontaminated by policy in the first place.

The third basic theory is that the balance sheet should be drawn up with an eye to the future, and that everything should be subservient to that end. The future is to a certain extent discounted. Lest things turn out to be not what they seem, they are now subject to all sorts of forecasts, and what is only probability is given the weight of fact. I think I am as conservative as any reasonable man, but I do not deem it to be the function of accounting to jumble up the prognostications of forecasters with the known facts of the past and present. I believe thoroughly in forecasting and making provision for the future as business necessities; for some things that will not actually happen until the future have application to the present—like the allowance for bad debts; but I desire to see such forecasts and such provision for the future shown separately and not consolidated with indisputable facts. Every provision for the future can perfectly well be shown for what it is.

My general comment on the whole situation is one that I am loth to make; but I suppose no unfortunate situation can be remedied until we face it. I make my comment, moreover, with full appreciation of the dilemmas with which an accountant is faced. Accountants have to deal with human nature, and with its proneness to think it knows all there is to know. They have to present figures that others will use—or very likely misuse, or at least misinterpret. It is difficult to make statements and records that are fool-proof in use. I like to think that that is the reason for the situation that I am about to state, viz.: the longer I live, and I have been dealing with accounts for almost half a century, the less faith I have that I can read a corporation statement, or a private internal report, and from it determine what is the financial situation behind it, *unless* from some outside source (such as my knowledge of the accounting practices of the people responsible for it) I know what accounting theories it embodies.

CONTRASTING THEORIES OF PROFIT

A. C. Littleton

When the French discovered the gulf of St. Lawrence and the long river beyond, they found the neighboring Indians well supplied with a variety of rich furs, and the natives saw that the white men were equipped with such desirable things as knives and iron pots. Since each party coveted some of the possessions of the other, trade was inevitable even without a common language or the aid of money. If the European was astonished at the number of beaver skins offered as the price of a knife, the savage was equally astonished that the white man should be willing to accept skins at all—beaver were everywhere; they were free to the one who took them. But sharp knives and strong hatchets, these were nowhere to be had.

Naïve as the Indian's "valuations" may have been, his practice of trading something given for something received was as natural as were unsatisfied wants. He gives what he wants but little in order to receive what he wants very much. If one has no unsatisfied wants or if he possesses nothing that someone else wants, there is no basis for an exchange. But if an exchange is effected, each party is satisfied with the results even though the trade seems to an onlooker as uneven as a cheap knife for five beaver skins. The reason for this, even though it may not be clearly perceived by the parties, is that each has gained in total utility as seen from his own point of view. Both, we would say, have "profited."

Here then, in primitive barter, is the basic concept of profit: *Profit is an individual's opinion of the increase of total utility, usefulness, or value-in-use that is his as the result of an exchange.*

From this it will be noted that a concept of profit does not need to be associated with money or accounts or formal calculations of any kind. Expected profit from consumption is simply a judgment of relative usefulness read into the goods received in barter, and accomplished profit, the test of the prior judgment, is the excess of consumptive satisfactions flowing out of the use of the thing received. If appearances of probable usefulness were deceptive or if one party's judgment were faulty, the exchange may of course yield a "deficiency" of satisfactions, a sort of negative profit.

In barter for re-trade, expected profit is a judgment regarding relative subsequent exchangeability of the new thing possessed in comparison with other, as yet, unpossessed desirable things. The test of this pre-judgment comes when the anticipated re-exchange is accomplished. If, subsequent to the first barter-exchange, no third person finds a prospective utility in the goods held for re-exchange, there is no second exchange and no accomplished profit for the trader; also if after a second barter-exchange, the goods then newly received should prove not to have the expected utility, there can be no accomplished profit.

In this analysis of barter certain characteristics of profit appear without the intervention of money or accounts. The first of these is that profit is a highly intangible, inconclusive element, depending for a trader upon an almost unending chain of events for its validity. Profit is not a thing in itself, nor is it a specific condition among things; it is an intellectual concept only and varies from person to person and from time to time.

Because profit is thus an extremely illusive element, two conclusions follow:

(a) Reality of profit should not be read into a situation too soon or upon inadequate evidence. This is the basis of the so-called "realization principle." When an objective test has verified a personal hope, conviction of reality may safely follow but not before. Anticipated profits are mere opinions and therefore subject to individual bias and mistaken judgment. Realized profits on the other hand have met an objective test, under conditions by which the utility of the goods has

been further attested by the independent judgment of a subsequent receiver in exchange. But even such "realization" may prove to be an incomplete test of reality because today's gains may be consumed by tomorrow's losses if the goods last received prove useless.

(b) Valuation is a part of the process of exercising sound judgment in consuming or trading, and forms the basis for all production and merchandising operations. And the ability to make sound judgments regarding consumptive wants and uses, and of trade opportunities exists quite independently of records as such.

The second characteristic of profit is that the clue to its existence is *relative utility*. Any conclusion concerning relative utilities necessitates a judgment concerning the goods given and the goods received. Here, I think, is the key to the surprising vitality of the old bookkeeping rule of thumb: Debit what is received, credit what is given. It continues to live, not because it is an adequate guide to resolving modern transactions into subelements which fit into a certain scheme of recording, but because we recognize, subconsciously perhaps but none the less effectively, that accounts are at heart records of giving-out and taking-in. Only by receiving one thing for another given can we benefit by specialization in the production of use-values. And it is only by exchanging one service-potentiality for another service-potentiality that differing ideas of utility operate to create a concept of profit.

Since a profit concept was present in every barter-exchange, it might seem logical to expect the first accounting records to have been related to profit measurement. But such was not the case. Egyptian records for example, were merely memory aids, a sort of stores-accounting in which various commodities, including money as one, were recorded as coming in and going out. The records of medieval money-changers were also memory aids showing, for their incompleted exchanges, what remained that a debtor "must give" and a creditor "must receive."

But simple records like these of commodities in their natural units, or of debts in various coinages, were of limited usefulness. Barter transactions soon grew too complex to be judged soundly on the old basis: actual consumption was too remote and the variety of goods too great to be comparable. The need thus appeared for a common-denominator to make differing elements homogeneous enough to be used in a single, summarized profit-estimate as a check upon yesterday's trading judgments.

This important, progressive step was taken in the middle ages when merchants began to combine (1) a standard money of account by which different commodities and differing coinages could be translated into a single system of money prices, and (2) a scheme of systematic records by means of which both completed and uncompleted exchanges were arranged for reference and summary.

These two systems, by making it possible to express divers goods-received and goods-given quantatively as aggregates of money-price, also made possible the representation of profit in quantative terms. It was merely incidental that the records system also incorporated debt records of the money-prices contracted to be later received or given; the central characteristic of double entry bookkeeping from the beginning lay in the impersonal accounts.

Since the money price involved in a bargaining transaction reflects the individual's judgment of prospective value-in-use and current value-in-exchange, money price can be used to replace the earlier mental concept of profit with a quantative measurement of profit from exchange. Since double entry bookkeeping is a record-methodology particularly designed to make use of money-prices, it is clear that bookkeeping is primarily an instrumentality for producing a quantative measurement of profit, and that the statement of wealth possessed at the beginning and end of a period is a secondary, and quite incidental result.

As modified by this development, the

concept of profit may be restated thus:

Profit quantatively expressed, is the excess of the prices received in bargaining exchanges over the prices previously given.

The assumptions underlying this idea are that bargained prices can and do reflect the individual's judgment of relative utilities and that a comparison of judgments thus rendered quantative will be more serviceable than mere mental images of the advantages of a series of exchanges. If the attempt to express profit in quantative terms does not come near enough to the full truth to constitute a useful substitute for mental images, then bookkeeping has no function but to record uncompleted transactions (debts) as a memory aid.

Out of this development of the concept of profit come several conclusions:

1. A uniform money of account (not to be confused with money having a stable value) can be used to render diverse elements quantative and homogeneous so that comparison and summation become possible.
2. Bookkeeping is an instrument of "quantification." In order to render profit estimates quantative, bookkeeping systematically records the bargained prices, in terms of a standard money of account, of things given and things received.
3. The use of these two processes does not change the illusive nature of profit or make its inconclusive characteristics more definite. Caution in accepting profit figures is still as necessary with money of account as it was in judging the utilities involved in direct barter-exchange.

Because the use of a standard money of account and records of price-transactions made it possible to deal with heterogeneous elements of business in arithmetical calculations as if they were physically homogeneous, we may say that accounting has helped business to make definite progress in acquiring something of scientific methodology. While it is clear that bookkeeping has thus made a distinct a social contribution, it should not be forgotten that the elements thus rendered homogeneous in the record are still the utilities of things given and things received.

The refinements of this bookkeeping analysis of receiving and giving which is now called the accrual system was the next contribution of accounting to scientific business methodology.

The practice of recording all transactions in terms of a standard money of account had the natural result of leading uncritical business men to confuse money with cash. They thus came to think of the accounts as showing cash collected (or cash to be collected from debtors) and cash disbursed (or to be disbursed to creditors). By an unconscious drift through a long period of time the fundamental processes of business thus came to be thought of as collecting and disbursing rather than giving and receiving goods as services.

What the accrual system did was to correct that mistaken conception. Those who used accrual accounting recognized the fact that bargained purchase-price, and not cash disbursed, was the element used to represent the thing received; that bargained sale-price, and not cash collected, was the element used to represent the thing given. This much could be deduced from those transactions which involved deferred payments. A further correction was made when it was also perceived that it was utilization of goods or services, and not the act of acquisition, which marked the appearance of expense; and that alienation of goods or the act of rendering a bargained service, rather than the receipt of an object in exchange, marked the appearance of income.

Here was a truely scientific separation of the substance from the shadow. All that was received, though coming in, was not income; all income, though taken in, was not in the form of cash collections. Not all disbursements, though going out, were expenses; not all expenses, though they were outgo, were represented by cash disbursements.

Thus it gradually became evident as accrual accounting developed, that the basic

elements of business, so long thought of simply as something received and something given, were in reality income earned and expense incurred. Although accruals are often presented as adjustments made to produce a more accurate statement of assets and liabilities, it is nearer the fact to say that accrued assets are recognized primarily in order to secure a more correct calculation of income, while accrued liabilities are recognized primarily in order to secure a more correct calculation of expense. In a similar manner deferred charges are used as an indirect calculation of the consumed portion of previously acquired expense-services, and deferred credits are used as an indirect calculation of the earned portion of income already received.[1]

The central purpose of accrual accounting is to bring into contrast the inflowing services acquired and used (as measured by expenses and costs) and the corresponding outflowing services rendered (as measured by income and earnings). With this as the base, the third re-statement of this concept of profit may be phrased somewhat in this manner:

Profit (net income) is the result of providing an out-put of economic services (thereby causing an in-flow of gross revenue) which is valued by the purchaser above the amount of in-put of economic services (brought about by an out-flow of expense) required to produce the services put out.

Out of this concept comes the conclusion that a refinement of the analysis of things given and things received makes it possible to approach more closely to a direct comparison between the services rendered to another and the disservices experienced in preparing to do so. In other words, the utility to the producer (as judged by his cost-price outlays) is set up against the utility to the purchaser (as judged by his buying-price outlay). The presence of a profit indicates to the producer that his economic service has proved acceptable in the market; the presence of a loss indicates that he has not been successful in providing an economic service of a kind and at a price which was acceptable in the market.

This is essentially the same as the first statement of the concept outlined above, for the utilities inherent in the quantities received as income in exchange for the output of service rendered are judged in comparison with the utilities parted with in producing the service.

By way of summary it may be noted that:

1. Receiving and giving is basic to economic life.
2. The association of receiving with giving is a basic purpose of accounting.
3. Accrual technique constitutes a refinement in the association of cost with revenues much as if costs represented effort and revenues represented results.
4. The producer judges his economic service to have been satisfactory when it brings him more revenue than the costs he had advanced, hence his primary interest is in the comparison of cost given and revenue received.[2]

[1] The accounting problems often treated under the head of "Capital and Revenue Charges" are but sub-problems in accrual accounting's major problem of associating revenue and its costs. The issues regarding acquisition, repair, replacement or depreciation of capital assets are principally questions of timing, of whether a given expenditure is an immediate deduction from revenue (an expense) or a postponed deduction from revenue (an asset). Such questions bulk large when fixed assets become an important part of the total investment.

In a similar way cost finding constitutes a series of subdivisions of the major problem of accrual accounting. Cost accounting forces attention upon the physical cycle of form-changing production activities. Outlay-costs are the representations of use-values acquired in the venture of producing an acceptable service. As a means of learning whether or not the service proves to be acceptable, the costs advanced must be carefully traced into assembled costs and finally into embodied costs now sold in the form of the new product. In this way costing is a part of the larger problem of judging the adequacy of the service rendered by comparing the price which the service commands with the cost of rendering the service.

[2] The producer may of course be mistaken regarding the utility or later exchange-value of the quantities received as revenue. Expressing things received (as a debit for example) in terms of bargained money prices does not render the ultimate utility any more certain than would be the case in direct barter. There was no substitute for sound judgment then without money or records and there is none now with both in use. Wider education makes for better judgments of relative use-values and thereby leads to fairer trading exchanges. But there are occasions in the unending sequence of events when debts are uncollectible and bank money, and even hard money, are not very acceptable receipts

Thus it is evident that there has been an inner consistency in the traditional views of profit even though time has brought modifications and refinements. Business custom, reaching backward far down the centuries, has consistently made use of original, outlay costs as the basis of profit calculations. Five hundred years of bookkeeping practice reflects this theory of profit because bookkeeping employs the ideas of business men. In a similar way commercial law reflects the same business tradition: original cost is the basis of profit calculations under dividend laws and income tax laws.

But this philosophy has lately been challenged; another theory has been advanced, a replacement-cost theory of profit. It may be briefly stated thus: *Profit is measured by the margin between the revenue which sales transactions produce and the amount necessary to cover replacement costs.*

It would be interesting to search out the logic possessed by this concept which could make it prevail against the forces of experience-tested custom, and then to determine whether we should see in this theory the result of a passing reaction to disturbed economic conditions or a concept which is the next step in evolutionary development. But the time to work it out is not available. I must be content to speculate a little about the origin of these modifications of the customary profit concept.

The doctrine of replacement costs in accounting seems to have two sources of American origin. The first is in public utility rate discussions where the problem of setting controlled selling prices at the proper level brings out many strong arguments, in periods of advancing prices, in favor of including the recapture of replacement prices as an element of the rate base. The second source of replacement doctrine is found in the point of view of promoters and investors who tend to judge balance sheet "values" by the yardstick of a rising stock market's capitalizations of prospective earnings.

It should be noted that both of these conditions constitute special cases which are peculiarly sensitive to price changes, one because close governmental control precludes the adoption of selling prices which would provide revenue to be stored up in times of plenty against the time of depression; the other because value judgments in connection with securities are based upon guesses of probable future business earnings.

It is difficult to see how we can justifiably follow special points of view in formulating a general concept.

Replacement cost doctrine also has a European source. There, a deliberate fiat money inflation made all common-sense rules inaffective, especially income tax laws. Of course an artificially generated competition in the raising of prices and getting rid of money would raise problems of pricing policy and problems of equitable taxes and conservative dividends. The managerial problems of inflation were terrific. But, nevertheless, the conditions were artificial, temporary and very unusual.

Should artificial, temporary and unusual circumstances dictate the formulation of a concept of profits which presumably would be expected to have a general application?

In the background of these replacement doctrines there run the waves of war and post-war price fluctuations. These price movements were made clear to our eyes by the newly developed statistical technique of index numbers, and only too plain to our experience, by the artificialities of a paper prosperity and, later by the amount of unemployment in a very real depression. The perspective of recent years is thus well suited to creating the impression that swift and extensive changes in price-levels are becoming a normal condition.

Then this recently formed impression encounters the familiar idea that accounting attempts to convert mental images of profit-utilities into definite quantitative terms, using for this purpose a method for recording the bargained-prices of both the input of services received and the output of services

in exchange for a service rendered. When such conditions are met protective provisions should of course be made, but they constitute second-thought revisions of a prior calculation of realized profit.

rendered. From the meeting of these two ideas—accounting as a record of original prices, and widely fluctuating prices as a normal pattern—there seems to have come the conviction that accounting for outlay cost can no longer be considered a dependable guide to those who look to accounts for essential information. And the conclusion then follows that account-keeping or financial statement practice must be modified to suit the new background.

These views seem to me to be based upon several fallacious assumptions.

1. The assumption that problems of income distribution (dividends, income tax, speculative security profits) are of more importance than problems of the measurement of the income generated by the creation of new wealth or the rendering of acceptable services.
2. The assumption that accounting has a more important obligation to supply data useful in managerial pricing policy than it has in facilitating the comparison of past input of services (costs) with past output of services (revenues).
3. The assumption that accounts and statements are merely tabulations of statistical data related to social income and as such are open to any desired manipulations by statistical methodology, such as weighting by index numbers, reduction to averages, elimination of seasonal variations, etc.
4. The assumption that accounting records of cost prices in the traditional manner will conceal from business men and investors the significance of contemporary price changes.
5. The assumption that recent price fluctuations establish the pattern of the future.

I believe that these assumptions are erroneous and that a concept resting upon unsound assumptions can not be accepted as sound.

The primary and central problem of business, and hence of accounting and finance, will always be income. This problem has two sub-divisions, one related to a methodology for computing the income created and the other to a methodology for criticising the economic reality of the results. The first of these is obviously accounting, when accounting is defined as a reasonable, realistic, convenient method of calculating profits by expressing quantatively a great diversity of actual business transactions. The second is valuation, which may be defined as an interpretative procedure designed to subject accounting results and business policies to critical examination. I am, you see, of the opinion that valuation is not accounting.

The fundamental error of those who argue that profit calculation by the use of replacement costs is a function of accounting is that they confuse the two separate techniques of computing and criticising.[3] If criticising—evaluating—is consciously accepted as a separate function, there is practically no limit to the ways in which the available data may be made into homogeneous statistical series and subjected to interpretative manipulation like any other social statistics. For example no one has made the suggestion but it probably would be very easy to substitute the simple statistical study of real income (ratio of money-income to price-level) and real wages (ratio of money-wages to cost-of-living) for the complicated technique of adjusting accounts by index number of wholesale prices for the purpose of becoming conscious of the significance of price changes.

But it is basic to this freedom of statistical analysis of the results of business operations that the original data of business operations be recorded and reported first in the way in which they transpired, that is in terms of bargained prices. This accounting is well prepared to do with a high degree of dependability while acting well within its function.

COMMENTS ON PROFESSOR LITTLETON'S PAPER BY WALTER STAUB

Professor Littleton's paper seems especially timely in view of the present day

[3] Cf. Edward G. Nelson, The Accounting Review, Dec. 1935, p. 316: "... an almost universal failure consciously to separate quantitative and qualitative analysis."

recognition of the prime importance of the income account. There was a time when, especially for purposes of credit granting, the balance sheet of an industrial or commercial enterprise was regarded as the basic financial statement to be studied by the creditor. Today it is recognized that, in the case of both creditor and stockholder, the income account is fully as important as the balance sheet and in some respects even more important. Fixed property which may represent a large investment has, after all, a value only commensurate with what it can earn, and the same thing might be said in principle (though perhaps in lesser degree) of inventories, particularly that portion of them which represents manufactured or partially manufactured goods.

In his paper Professor Littleton emphasizes the desirability of continuing to base the determination of income on cost rather than on replacement cost or other alternative methods. This is in line with a concept to which I endeavored to give expression in an article written for the *Journal of Accountancy* a quarter century ago under the title of "Deferred Charges to Operating." I endeavored to bring out the thought that, with the possible exception of cash and receivables, practically every asset on the balance sheet is really a deferred charge to operating and that the treatment thereof is based on that principle. This is particularly true when the cost basis for determining income, which is urged in Professor Littleton's paper, is adhered to.

It is true that there is a well recognized variation from the cost rule in the case of inventories, namely the now generally adopted rule of "cost or market, whichever is lower." Here the departure is for the purpose of recognizing, or providing for, a potential loss because of a decline in the replacement cost of goods acquired at a higher original cost. The question might well be raised whether it would not be more informing to provide for the difference between cost and lower market (i.e., replacement cost) by a so-called reserve or provision, rather than by writing down the inventory itself, and to apply such difference as a separate item in the income account following the determination of income on the cost basis. This would permit of applying the cost method of determining income, as advocated in Professor Littleton's paper, by showing the results of operations on that basis, and also giving the effect of applying the "cost or market whichever is lower" rule. There are practical difficulties in working this out in the case of those businesses which do not have a system for applying cost against each sale and I refer to such a procedure merely to suggest it for possible future consideration.

Assuming for purposes of discussion the acceptance of Professor Littleton's advocacy of cost as the basis for the determination of income, the question remains which cost is to be applied to the goods sold and which cost is to be applied to the goods remaining on hand. In the course of any fiscal period there will usually be a series of like articles purchased or produced (and also carried forward from the preceding period) at differing costs,[1] and the question then arises whether cost shall be determined on the basis of "first in, first out," or "last in, first out"; or "average of the beginning inventory cost plus subsequent purchase or production cost" (on a weighted average basis)?

This question has been receiving renewed consideration during the last few years because it is of greatest importance in periods when a radical change in the price level occurs (whether up or down). When the price movement is upward, as during the World War, the use of the "first in, first out" costing of sales tends to show large profits because of selling at mounting prices goods purchased at the lower price level, although if the concern is to remain in business it must immediately replace the sold goods with others purchased at prevailing higher prices.

The effect is that the valuation of the inventory is at the highest recent cost, and the profits shown on goods sold have to a

[1] The varying profit results obtained by applying different cost or inventory methods were well illustrated by Mr. George O. May in an article on the Influence of the Depression on the Practice of Accountancy, *Journal of Accountancy*, Vol. LIV, pp. 336–350.

large extent not been realized in the sense that they are available for distribution, because they have had to be reinvested in large part in maintaining a stock of goods no larger in quantity than that previously carried for a much smaller investment. When the inevitable drop in the price level occurs, large losses on inventory values are shown in adjusting to "cost or market, whichever is lower."

In 1920 many concerns showed inventory losses which offset to a considerable extent the large profits apparently earned during the war period. Similarly, large inventory losses due to the tremendous drop in prices during the present depression have in the case of many companies absorbed profits shown during the time that a high cost was being developed for the inventory.

The question has been raised whether, assuming a starting inventory at a low enough level so that prices would hardly drop below it excepting under catastrophic conditions, the use of the formula of "last in, first out" in costing goods sold would not result in a truer picture of actual profit. The argument can be made that there is a closer relation between the prices of goods last purchased and of the goods currently sold than between the earliest purchases of goods on hand and of the goods currently sold.

In the case of industries or concerns the inventories of which are ordinarily very large in relation to other assets—as, for example, the oil industry where large quantities of crude oil may be carried in stock continuously—the "last in, first out" method of costing sales has a tendency to minimize the extreme of profits and losses. The profits shown in periods of rising prices would tend to be less than by using the formula of "first in, first out." Correspondingly, in periods of falling prices such losses as might be shown in reducing inventories to lower market prices would not be as great as would otherwise have to be taken. It is to be noted that the formula of "cost or market, whichever is lower" would still govern the valuation of the inventory and would correct the tendency which might develop in a period of falling prices for the inventory to remain at a higher price level than the current prices at which sales would be costed.

The "last in, first out" formula is being given study by an inventory methods committee in one of the large industries of the country at the present time. Any method which will tend to minimize the profits shown in periods of rising prices which are not actually available for distribution, because of the need for retaining at least a material portion of such profits in the business as added working capital and thus subjecting it to a business hazard which becomes greater the higher the price level rises, is worthy of careful consideration.

If such a cost formula or method were generally adopted in an industry, it would be desirable to show as a memorandum on the balance sheet the current replacement market value for the inventory. This would assist in giving a full understanding of the situation to those extending credit to a given concern or to those who wish to make an intelligent comparison of the financial position of various companies in the same industry whose inventories may be carried at differing costs. Even under the present more general use of the "first in, first out" cost formula, the supplementing of the valuation at which the inventory is carried in the balance sheet by a memorandum of the approximate replacement market value thereof would be informing.

The average cost method of carrying or valuing the inventory may be said to be intermediate between the "first in, first out" and "last in, first out" methods. It is probably less used now than was at one time the case, though it is still the method generally used in at least one of the major industries of the country.

An inventory method which has somewhat the same end in view as the "last in, first out" cost formula is the base stock method. It has the virtue of conservatism, both from a balance sheet point of view (assuming of course that the base price, which remains unchanged, is set sufficiently low at the inception of the use of the method) and from the point of view of the earnings shown during an era of rising prices. The

leading exponent of this method in this country is the National Lead Company which has clearly explained the method in its annual reports. Another of the prominent industrials of the country, the International Harvester Company, used the method for a few years at the close of the World War period but discontinued it when the United States Treasury refused to accept the method for income tax purposes. The refusal of the taxing authorities in both the United States and Great Britain to accept the base stock method for valuing inventories has probably discouraged a more general use of it by industrial companies.

WHAT THEY SAY ABOUT DEPRECIATION

HENRY R. HATFIELD

THIS IS AN assembly of instructors. While many of you have the advantage over me of being also practicing accountants, in this meeting we all should primarily be interested in the teaching of accounting rather than in its practice. I shall therefore make no reference to published balance sheets and income statements nor to the form and content of the auditor's certificate. I shall examine solely what the textbooks and other treatises on accounting have to say in regard to depreciation assuming that what is contained in these books approximately represents what is taught in our classes.

This is an association of *university* instructors and therefore I may properly assume that we all cherish high standards; that as university men we are interested in the nicety of expression; that even correct ideas do not satisfy us if they are concealed by vague verbiage; and that we stand firmly for clear thinking, for logical consistency, and for lucid exposition.

Unfortunately the standard in accounting literature has been relatively low. Let me cite a single extreme, but probably not unique, example taken from a textbook which has had very wide use throughout the country. On a single page this stated that assets equaled liabilities and also that proprietorship is equal to the difference between the assets and liabilities. On reading this, unless it is accepted blindly as being somewhat in accord with traditional statements, one must ask whether the author was incapable of straight thinking or was he culpably careless in the presentation of his thought. Whichever may be the answer, surely as university instructors we must deplore such an example of what Professor Willett has called "loose and lavender language."

It would seem as if by this time the subject should have been pretty well threshed out. To be sure it is frequently said that only recently has there been a proper recognition of depreciation as a factor in accounting. Certainly until relatively few years ago very many American corporations made no reference to depreciation in their published reports. So late as 1906 when the Interstate Commerce Commission required that depreciation be reckoned on certain railroad property, it was so much of an innovation that many high railway officials vigorously opposed it. But the recognition of depreciation is not limited to the present century. Professor Littleton calls attention to the first specific exposition of the proper handling of depreciation in accounts which he has found. This is in the textbook by Inglis published in 1861. Probably many of you have received from the University of Michigan a reproduction of accounts showing depreciation taken from the textbook by Monteage, published nearly two hundred years earlier, that is, in 1675; but again that indefatigable researcher in the history of accounting calls attention to *pro forma* accounts appearing in the textbook by Mellis, published in 1588. While there may be some question as to whether these accounts actually represent the handling of depreciation in the now accepted sense, there is at

least a possibility that such is the case. But long before this, in 1408, the books of Francesco di Marco da Prato (according to Penndorf) show an unquestionable allowance for depreciation. But even a more extended leap backwards may be made to Vitruvius' work on architecture in which he lays down the rule that in valuing a masonry wall, one-eightieth of its cost should be deducted for each year it has stood, this resting on the assumption that such a wall has a life of 80 years. Here we have a very clear recognition not only of depreciation but an acceptance of a straightline method.[1]

Despite the nearly twenty centuries since Vitruvius wrote, accountants are not of one voice on the subject, nor have they all learned to make satisfactory exposition. In this paper I shall attempt to show what recognized writers have actually said, and to draw attention to what seem to me to be inconsistencies, contradictions, and confusion.

Should I seem too critical, may I plead that it is only the printed word which is criticized. I am sure that the writers in most of the cases would refuse to abide by the letter of their statements. Sometimes it is merely a case of failing to state an implied proviso or exception, sometimes the slipping in of a conventional phrase, whose long acceptance has obscured its ineptness. And finally, I am sure that the criticized passages do not imply a lack of understanding. Of this I am sure for I have myself committed all the things[2] of which I complain, and who am I to say I have not intelligence and understanding?

One difficulty in discussing depreciation is in distinguishing between the fact of depreciation and the recording of the fact in the accounts.

The fact is itself a physical or economic phenomenon. There is almost universal agreement that a physical asset does, in the process of use, wear out, at least to the extent of making its continued use uneconomical. The economic phenomenon which may be correlative with the physical phenomenon, but may often-times be independent thereof, is that with continued use of a physical asset the services which it renders tend to become exhausted. Hence, in the absence of disturbing outside influences, the lessened number of service units which the asset remains capable of yielding are of less value than were the larger number originally embodied in the asset.

Accounting does not concern itself with the actual wearing out of an object.[3] But in so far as the wearing out of an asset, or the exhaustion of its potential services affects the value to be ascribed to the asset by the going concern, accounting is called upon to make some record of such changes. To take ridiculously simple illustrations: if the friction involved in its use actually wears out the substance of a brake lining, so that after the car has run 20,000 miles it is no longer serviceable, it is obvious that a lining which has lasted for fifteen thousand miles is of less service value than one which has run only 5,000. Or, taking a case where physical wear is not the significant factor, if machinery is erected at a mine, in such circumstances as to make removal uneconomical, that machinery, when the mine is half exhausted, will have the power of rendering a smaller number of service units than when it was first installed. It is immaterial that the brake lining may perhaps stop the car as quickly on the fifteenthousandth mile as on any preceding mile; it is immaterial that the machinery is in no sense half worn out. In the absence of price fluctuations, no one would willingly give as much for an asset whose supply of service units is partly exhausted as he would for that asset with undiminished fertility. When half of the contents of a barrel of oil has been extracted, no

[1] For this I am indebted to Mr. H. E. Hale in his "What Is Depreciation?" in the *Railway Age*, Vol. 86, p. 403 (Feb. 16, 1929).

[2] I wish to modify the statement originally made. I confess committing some of the errors, but not all of them. Decidedly not all.

[3] Occasionally an accountant uses an expression which on the face implies that accounting records changes in the asset rather than changes in the value attached to the asset. Thus C. Bowman and A. Percy state (*Principles of Bookkeeping and Business*, N. Y., 1927, p. 53) that "Depreciation represents that portion of the asset consumed in operating the business." But this probably is an inept expression rather than an indication of a difference of opinion.

one (again with proviso of there being no change in price) will give as much for it as he would have given for the barrel when it was full. The same of course applies to the services which may be said to be barreled up in some physical asset.

The fact of depreciation is admitted by all. Inevitably the service value of any fixed asset (with some few possible exceptions) decreases with continued use. One need quote only the statement in "Accounting Terminology": "Depreciation is loss in physical or functional value due primarily and chiefly to ordinary wear and tear."

Having recognized that the service units to be rendered by a machine diminish during its service life, the real accounting problem is how is this fact to be recorded in the books. This is a problem in the technic of accounting and should be kept distinct from the physical or economic fact previously mentioned. Yet the same term "depreciation" is used now to mean the one, now the other thing. This confusion is found not merely as between the writings of different authors, but as well in the texts of the individual authors. Some clear examples of such confusion are the following.

"Depreciation" says one eminent writer "means the consumption in production processes of a preliminary outlay in such [fixed tangible] assets as make production possible" but in the same article he says: "depreciation is to maintain the capital intact."[4]

Waiving for the present the question as to the legitimacy of the latter statement in itself, how in the name of all accountants from Luca Paciolo to Fritz Schmidt can "consumption" ever maintain capital? Capital may be maintained despite consumption but to consume is *not* to maintain. The first phrase evidently relates to the physical fact. The second gives an alleged result of making a certain booking of the fact.

Another writer says "Depreciation . . . is an impairment of value" and on the very next page, "Depreciation cares for that portion of a plant . . . consumed."[5] Again waiving the appropriateness of the latter statement *per se*, it is surely the case that when he mentions "impairment" he is referring to the physical or economic fact; when he says it "cares for" he is referring to the bookkeeping entry. Yet he uses the same term for both, apparently unmindful of the confusion of thought involved therein.

Another, most recent writer, must be referring to different things when he speaks on two contiguous pages of depreciation as a *decrease in value* due to wear and tear and as the periodic *retrieval of value*.[6] I care not whether one or the other is the proper statement. Both cannot describe the same phenomenon.

Again, in a widely used text, recently revised, it is stated, again on consecutive pages, that depreciation is an "exhaustion of capital assets" and that it is the means of "reserving out of earnings" etc.[7] Did exhaustion of assets ever reserve anything out of anything? The second phrase relates to the supposed effect of making a given entry, the first clearly describes a purely physical phenomenon.

But criticism of accounting literature is not limited to the confusion of the fact of depreciation with its recording in accounts. Even in the technic of booking, the peculiar province of the accountant, one finds confusion and inconsistency.

One would suppose that those writing texts inculcating the principles (if such there be) of accounting, would not feel the need of any defense mechanism, would not attempt any artificial rationalization for so reasonable a procedure as recording depreciation. Depreciation is a fact. It is a fact which evidently affects the financial status, or the operating results, or both, of the business enterprise. One seeks for no esoteric reason for recording the payment of cash, and its receipt, nor for the coincident emergence of loss or profit. But in the literature of depreciation, various alleged, but irrelevant, reasons for booking depreciation in its two-fold aspect are found. According

[4] Fedde, A. S., *International Congress on Accounting* (1933), pp. 656 and 675.

[5] Racine, S. F., *Accounting Principles* (1917), pp. 131, 132.

[6] Burtchett, F. F., *Corporation Finance* (N. Y., 1934), pp. 591, 592.

[7] Bell, W. H., and Powelson, J. A., *Auditing* (N. Y., 1932), pp. 229, 228.

to these, the booking is not made to record the facts but according to some, it is to "maintain" or to "provide" or to "replace" or to "reserve" or to "set aside" or as one of the most authoritative writers has it, lest "the investors be left at the end of the decade with no useful property."

No writer, so far as I have observed, has ever said that when fuel is consumed, a record must be made in order to provide for something in the future, nor to replace the consumed fuel, nor to set aside something else in place of the fuel, nor so that the investors will not be left with no fuel on hand. Without exception, one is told to record the consumption of fuel in order to show that there is less fuel on hand than previously, and that a coincident and equivalent expense has been incurred. The function of accounting is to record all the recognized events which enter into the operations (in the broader sense) of the concern. Why, then, this peculiar and irrational urge to find other justification for recording depreciation than is required for recording the consumption of fuel? The accountant's sole and supreme obligation to tell the truth applies to both. If this is done, no other justification is needed.

One who for many years has lectured on accounting to classes of previously unenlightened beginners cannot even in this place break the habits to which he is so accustomed. Shall not the dyer's hand be subdued to what it works in? Therefore I cannot refrain from stating that in recording depreciation there must be a debit and a credit—a statement which to your ears is startling only because of its triteness, but it serves as a guide to further discussion.

The debit is ordinarily to an account called simply Depreciation. As to the nature of this entry there is comparative agreement. The most generally accepted view is that it represents an operating cost. I have listed some twenty-five writers who in no uncertain terms make this statement. Many of these elucidate further by saying that it is just as much a cost of operating as is consumption of fuel or any other of the items universally listed under operating costs.

There are others (I have listed three),[8] who describe the charge to depreciation as representing a cost, not specifying it as an *operating* cost. Similarly depreciation is said to be "losses actually incurred."[9] Another eminent writer says it is "a loss, a definitely experienced loss."[10] If, indeed, the *actual* loss is not known, it is "the *estimated* loss from the wearing out of the assets,"[11] or, again, it is the "loss or expense resulting in a reduction in the value of an asset."[12]

Only two writers are noted who at least superficially present a different opinion. Professor Canning, in his truly illuminating book, says "Depreciation is not an expense in and of itself, it is the outlay for the depreciating object that is the primary expense."[13] I do not myself like this statement but it need not be discussed here. For whether it is the payment or the gradual consumption that constitutes the expense, in either case the annual charge to depreciation represents an expense allocated to that period.

The other statement is that "depreciation of assets is merely an expression of values . . . that have reproduced themselves."[14] It is probably unnecessary to tarry over this lone voice of dissonance. *Athanasius contra mundum* was a noble figure. But, while standing by one's opinion in the face of all the world may indicate a noble character, it does not guarantee that the opinion held is correct. Besides, the disagreement is probably more a difference in the form of statement than in the attitude of mind. To this writer apparently all "expenses of operation" are "values which have reproduced them-

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[8] Klein, Joseph J., *Students Handbook of Accounting* (N. Y., 1915), p. 76. Leake, P. D., *Depreciation and Wasting Assets* (London, 1912), p. 33. Moore, K. A. E., and Moore, Michael, *Company Accounts and Balance Sheets* (London, 1931), p. 62.

[9] Dickinson, A. L., *Accounting Practice and Procedure* (N. Y., 1914), p. 45.

[10] Dewing, A. S., *Financial Policy of Corporations.* 3rd ed. (N. Y., 1934), p. 562.

[11] Sanders, T. H., *Industrial Accounting* (N. Y., 1929), p. 146.

[12] Sunley, W. T., and Pinkerton, P. W., *Corporation Accounting* (N. Y., 1931), p. 174.

[13] Canning, J. B., *Economics of Accountancy* (N. Y., 1929), p. 129.

[14] Castenholz, W. B., *A Solution to the Appreciation Problem* (Chicago, 1931), p. 65.

selves" so that the statement regarding depreciation does not exclude it from operating costs.

With this consensus regarding the nature of the debit entry (when one debits Depreciation and credits Allowance (or Reserve) for Depreciation) it is a great surprise to find such disagreement as to the meaning of the credit side of the entry. When it is said that the debit indicates the expense, or loss, due to the using up of part of the value of the machine, it is difficult to understand how anyone can logically say that the credit account represents anything other than the reduction in value[15] which has been the occasion of the loss or expense. Many authors not only understand this, but possess (what is not always an accompaniment of clear understanding) the ability clearly to express the correct idea.

I have again listed more than twenty-five writers, by no means an exhaustive list, who thus interpret the meaning of the credit item. It is not necessary to quote these; they run from Sprague and Cole, the first scientific American texts, down to the very latest treatise just off the press, that of McKinsey and Noble. But it is interesting and somewhat appalling to note the dissentients. Or perhaps it were better to say "to note the dissonance" for it is what they say rather than their well-concealed thoughts that trouble us.

1. Mention may be made first of what is perhaps the most appalling group of writers. These are they who say, not that the allowance for depreciation represents a deduction from the amount debited to machinery, but that the credit balance in the allowance account implies an equivalent amount of cash. The following examples are given:

> The whole object of providing for depreciation is to save up money to meet a known future expenditure.[16]

> Inasmuch as the charge to Depreciation Expense involves neither a concurrent expenditure of cash (or other current assets) nor the assumption of a liability, there will be a sum of cash (or other current assets) equal to the amount so charged . . . .[17]

> Depreciation . . . does not mean a thing unless expressed in cash reserves.[18]

> [If $90 depreciation is charged each year for 10 years] the utility would have on hand the sum of $900.[19]

These statements are taken from recognized authorities, of highest standing. They knew better. Two of the four have elsewhere made a correct statement. But it is fair in this somewhat dialectic discussion before a group of academic men, to take the words as they read. For it is the printed word which confronts the beginning student. The statements made are clearly unsatisfactory in two respects. First there is omitted the essential proviso that the business has not run at a net loss. You all know that operating deficits do occur. In some cases the amount charged to depreciation may have been larger than the deficit for the year. If there had been no charge to depreciation there would have been no deficit. In such a case there is no other asset corresponding to the allowance unless you call the deficit an asset, which Heaven forbid! The second defect is that even if cash came in, in sufficient amount, there is no reason for assuming that there will be an accumulating amount of cash keeping pace with the accumulating allowance. Is any intelligent manager likely to withhold for 10 years,—is any manager, intelligent or not, going to withhold for 50 years, cash equalling the growing allowance? Will he not use it to pay debts or to extend the plant, so that when the asset is abandoned after half a century's use, there will *not* be a sum of cash on hand equal to the value consumed? Why then say there will be? Even though you cross your fingers while saying it. The student reading the text sees the author's words, not his fingers.

2. Closely akin to this is the view ex-

[15] Value as here used presumably refers to the unabsorbed cost, without reference to current market prices.

[16] Dicksee, L. R., *Auditing*. 13th ed. (London, 1924), p. 155.

[17] Paton, W. A., and Stevenson, R. A., *Principles of Accounting* (Ann Arbor, 1916), p. 144.

[18] Allen, T. H., "Depreciation as It Applies to Physical Properties." *The Certified Public Accountant* (Jan., 1936), p. 10.

[19] Wisconsin Public Service Commission. *Depreciation; A Review of Legal and Accounting Problems* (Madison, 1933), p. 23.

pressed by writers that while not necessarily implying an amount of *cash* on hand, the allowance for depreciation does imply the existence of a fund composed of current assets. Such are: "The sole function of a depreciation reserve or allowance . . . is to prevent the impairment of its capital invested in physical assets and to provide a fund for the replacement of such assets . . . ."[20]

In passing, is it not strange that the *sole* function consists of two unrelated acts? And how can the provision of a fund prevent the impairment of the physical assets? Isn't such impairment inevitable as the asset wears out? Again: "Depreciation reserves [are] a fund to be used in cases of the wasting of fixed assets, such as wear and tear . . . ."[21]

Another: "The fund . . . created [by setting up a Reserve for Depreciation]."[22]

3. Without using either of the terms "cash" or "fund," a similar idea is expressed in the following:

> [Depreciation] reserves are amounts set aside out of earnings . . . bookkeeping entries setting aside each year an amount . . . .[23]
>
> the amount to be set aside [for depreciation][24]
>
> a common practice is regularly to set aside sums called depreciation or replacement charges.[25]

The same general attitude is shown by those who assert that the allowance for depreciation shows that some other asset has been substituted for the consumed value of the depreciating asset. For examples:

> Depreciation is the periodic retrieval from current incomes of the value . . . .[26]
>
> The reserve for depreciation measures the expired portion of the original cost of the assets and also indicates that the loss has been covered out of the gross income of the business.[27]

not universally true

> the amounts . . . which are from time to time written off or recovered out of gross income as provision for depreciation . . . .[28]
>
> Depreciation . . . is merely an expression of values in one form that have reproduced themselves in other forms.[29]

Perhaps it seems hypercritical and pernickity to object to a statement merely because a proviso which some might consider obvious, has not been stated. But if we prate of the science of accounting, are we not to be held to scientific accuracy of statement? When we read in algebra $(a+b)\times(a-b)=a^2-b^2$, we assume it is universally true. Its truth does not depend on a being smaller than b. No such proviso being stated, we assume there is none.

When one says that the allowance for depreciation shows that other equivalent assets have replaced the consumed value of the fixed asset, the statement is not universally true. It is true only when expenses are not greater than earnings. If the algebraic equation depends on the relative value of a and b the proviso must be stated or algebra is no science. The analogy I think holds. The authors I have quoted did not state the proviso. *Very* few writers do so.

4. Another group of incorrect expressions is the following: Accepting the doctrine that the booking of depreciation is an attempt to ascribe to each period the appropriate amount representing the consumption of cost logically allocable to that period, expressions are nevertheless used as follows:

"*Eventual* loss,"[30] "*expected* losses,"[31] "*anticipated* losses,"[32] "to meet a known *future* expenditure,"[33] "shrinkage from depreciation etc. may be *anticipated* . . . by setting

[20] Bowker, W. T., "Obsolescence." *American Appraisal Co.* (1923), p. 3.

[21] Coles, A. C., *Company Accounts* (N. Y., 1920), p. 221.

[22] Dewing, A. S., *The Financial Policy of Corporations.* 2nd ed. (N. Y., 1926), p. 461.

[23] Wall, A., and Duning, R. W., *Ratio Analysis of Financial Statements* (N. Y., 1928), p. 71.

[24] Montgomery, R. H., *Auditing—Theory and Practice.* 4th ed. (N. Y., 1927), p. 683.

[25] Mosher, A. W., "Depreciation Based on Unit Cost." *Journal of Accountancy,* 52: 29 (July, 1931).

[26] Burtchett, F. F., *Corporation Finance* (N. Y., 1934), p. 591.

[27] Sanders, T. H., *Industrial Accounting* (N. Y., 1929), p. 146.

[28] United States. Department of Commerce. Business Advisory and Planning Council. *Reports to Stockholders* (Wash., 1934), p. 17.

[29] Castenholz, W. B., *Solution to the Appreciation Problem* (Chicago, 1931), p. 65.

[30] Howitt, H. G., *International Congress on Accounting* (1933), p. 626.

[31] Goggin, W. J., and Toner, J. V., *Accounting Principles and Procedure* (Boston, 1930), p. 265.

[32] Racine, S. F., *Accounting Principles* (Seattle, 1923), p. 214.

[33] Dicksee, L. R., *Auditing.* 13th ed. (London, 1924), p. 155.

up a reserve,"[34] "Net loss occasioned by retirements."[35]

In all these expressions the implication is that the loss is not one which has already occurred, but one which is bound to, or may possibly, occur in the future. This certainly does not harmonize with the idea that the attempt is being made to record what has been consumed during the current fiscal period. Similar in thought, although expressed in different terms, are the following:

Charging depreciation and crediting depreciation reserves provides for the recovery of an original stated outlay . . . .[36]

Depreciation is charged off for the purpose of providing an allowance . . . for the purpose of replacing the plant facilities when they are worn out or become obsolete.[37]

Provision for the replacement of the depreciated assets . . . .[38]

. . . the amount which the depreciation reserve should contain in order to make provision, through operating expense charges for the net loss occasioned by retirements.[39]

5. Other authors look upon the Reserve for Depreciation not as a negative item to be subtracted from the value attached to the machine but as a positive force that does something.

The sole function of a depreciation reserve or allowance . . . is *to prevent* the impairment of its capital.[40]

The amount of capital invested in the asset is *to be kept* at its original amount *through the credit* to the depreciation reserve.[41]

A depreciation reserve account is one set up . . . for the ultimate *replacement* of property.[42]

the systematic provision from year to year of an adequate sum to cover the depreciation of wasting assets . . . and thus *to provide* for their renewal. . . .[43]

The capital sum *to be replaced* by depreciation allowance.[44]

6. A sixth misconception, or more charitably, a sixth misleading expression, concerns the relation of the allowance for depreciation to profits despite the consensus that the debit indicates an expense or loss.

"Reserve accounts," says one, "are created for the purpose of showing on the *credit side of the accounts* the amount of profits required to be set aside . . . ; and on the debit side the actual loss from depreciation. . . .[45]

And this although on the same page it is said that the balance of the reserve for depreciation account shows the amount by which the cost (or the depreciating asset) has diminished by reason of the estimated wear and tear and efflux of time.

the depreciation reserve is set up to measure the true value of the asset . . . and also to withhold from free profits amounts which will be required in a subsequent period for replacement.[46]

a provision out of profits to the extent of cost[47]

the reserve account therefore represents profits withheld from capital.[48]

7. Other writers misled by the objectionable phrase "Reserve for Depreciation" look upon the credit entry as a "means of reserving out of earnings"[49] or as another most distinguished member of our Association puts it: "In providing depreciation there is a reserving or withholding from gross in-

[34] Belding, A. G., *Accounts and Accounting Practice* (N. Y., 1918), p. 173.

[35] Wisconsin Public Service Commission. *Depreciation; A Review of Legal and Accounting Problems* (Madison, 1933), p. 64.

[36] Castenholz, W. B., "The Accountant and Changing Monetary Values." Accounting Review, 6: 283 (Dec., 1931).

[37] Frank, T. B., "Depreciation Accounting in the Machine Tool Industry." *N. A. C. A. Bull.*, 9: 1398. (No. 24, sec. I.) (Aug. 15, 1928.)

[38] Reitell, C., and Van Sickle, C., *Cost Finding for Engineers* (N. Y., 1930), p. 106.

[39] Wisconsin Public Service Commission. *Depreciation; A Review of Legal and Accounting Problems* (Madison, 1933), p. 64.

[40] Bowker, W. T., "Obsolescence." *American Appraisal Co.* (1923), p. 3.

[41] Lawrence, W. B., *Cost Accounting* (N. Y., 1931), p. 308.

[42] Bernard, R. J., "Depreciation and Depreciation Reserves." *American Accountant*, 15: 305 (July, 1930).

[43] Dicksee, L. R., *Depreciation, Reserves, and Reserve Funds* (London, 1912), p. 72.

[44] Grimes, J. A., "The Income Tax—Depletion and Depreciation." Accounting Review, 3: 175 (June, 1928).

[45] Bentley, H. C., *The Science of Accounts* (N. Y., 1911), p. 149.

[46] Russell, F. C., and Hurdman, F. H., *Accounting Principles* (N. Y., 1924), p. 205.

[47] Fedde, A. S., "Depreciation and Obsolescence." *International Congress on Accounting* (1933), p. 667.

[48] Goggin, W. J., and Toner, J. V., *Accounting Principles and Procedure* (Boston, 1930), p. 265.

[49] Bell, W. H., and Powelson, J. A., *Auditing* (N. Y., 1924), p. 228.

come. . . ."[50] I ask you all and particularly do I ask him, who in the discussion to follow is expected to lambaste and excoriate this paper: Is an entry showing a diminution of value a means of doing anything except showing that diminution, or how can a mere bookkeeping entry withhold anything?

8. Some writers state that the Allowance, or Reserve, for Depreciation represents a "liability for the ultimate retirement of the plant. . . ."[51] I recognize the high authority, and pay respect to the ability and acumen of these authors. But if a credit to the Allowance for Depreciation is an alternative to a direct credit to the Machinery Account, how can it also show a liability, no matter how tenuous, transcendental, or esoteric a connotation may be attached to the accounting term "liability"?

The statement that the Allowance represents a liability is coupled with one which explicitly says that the debit indicates "as much a cost of operations as are current payroll and material expenditures . . . ."[52] An expense according to current accounting theory can occur only with the following alternative accompaniments. An expense may arise when an asset is diminished as when material is consumed, or cash is paid out. Or expense occurs when, without other changes, a new liability is created, e.g., when interest payable, or unpaid wages accrue. But there cannot be both a \$1000 diminishment of assets, and a \$1000 increase of liabilities with an expense of only \$1000. Wages expense of \$1000 cannot be a corollary of \$1000 paid for wages and also of \$1000 accrued payroll. It just simply can't be.

Say if you like (personally I do not like) that the credit to reserve shows a liability. But if you insist on this interpretation you have thereby abandoned any indication that the service value of the asset has diminished. Is that good accounting? But whatever you do, do not say that the credit indicates both A− and L+.

Shades of Luca Paciolo who combined in a single volume the first printed treatise on both algebra and bookkeeping! May we thy undutiful disciples ever remember that the two are related. May it be forgiven us when we say $-1000P = -1000A + 1000L$, for it is neither good bookkeeping, nor good algebra, nor good barnyard arithmetic!

9. The following quotation is from the most comprehensive book on depreciation. The author states:

> if the manufacturer omits depreciation costs he merely delays recovering the loss until some later period.[53]

Time limits compel the excision of my discussion of this. I merely suggest:

(1) Recovery does not depend on a bookkeeping entry but on the amount of earnings.
(2) There is no assurance of even a postponed recovery, and
(3) the statement that a loss is *ever* recovered is at least debatable.

A final quotation from an accountant and professor of accounting, who stands so high in the hierarchy of the profession that when we mention his name we do so with the bated breath of reverence. He stated that an allowance for depreciation is an allocation of cost, and, not indeed on the same page, but some 20 pages later (yet one ought to remember for at least 20 pages what he himself has written) headed a paragraph in heavy faced type "Investment of Depreciation Allowances."[54] I have heard of those who proposed to pay a dividend or even to run a government, out of a deficit but I cannot understand through what investment banker one invests an "allocation of cost."

To sum up:

1. There is confusion of the *fact* of deprecia-

[50] Sanders, T. H., *Industrial Accounting* (N. Y., 1929), p. 146.

[51] United States. Department of Commerce. Business Advisory and Planning Council. *Reports to Stockholders* (Wash., 1934), p. 18. Ball, T. F., "Can the Authorities Get Together on Depreciation?" *Public Utilities Fortnightly*, 13:6:347 (March, 1934). Similarly: Cole, W. M., *Accounts—Their Construction and Interpretation* (Boston, 1908), p. 83.

[52] United States. Department of Commerce. Business Advisory and Planning Council. *Reports to Stockholders* (Wash., 1934), p. 17.

[53] Saliers, E. A., *Depreciation—Principles and Applications* (N. Y., 1922), p. 111.

[54] Montgomery, R. H., *Auditing—Theory and Practice*. 4th ed. (N. Y., 1927), p. 698.

tion and the consequent accounting therefor.

2. There is agreement that in booking depreciation the debit represents a cost or expense due to the consumption of service value. This is fundamental to any theory of depreciation.
3. In regard to the credit various expressions are inconsistent with the above theorem. Among these are the following statements regarding the allowance:
   (1) that it implies cash on hand
   (2) that it implies a fund, not necessarily cash
   (3) that it implies the possession of other equivalent assets, although not necessarily impounded in a fund
   (4) that it relates to a future contingency, not to an already incurred expense
   (5) that it is not a negative quantity but an active force
   (6) that it is part of profits
   (7) that it shows a reservation
   (8) that it shows a liability
   (9) that it recovers a loss.

This all seems irreconcilable with the thesis that depreciation is the loss in value due chiefly to wear and tear.

I do not impugn the intelligence of any author, even myself, who has made these or similar statements. I merely criticize the language used. I do not deny that in the very works from which I have quoted, there are other passages which clearly prove that the author had the correct understanding. I merely deplore the presence in these works of conflicting statements, which must confuse the beginning student. I do not claim my own writings to be free of these and similar inaccuracies, though modesty of course prevents quoting my own works. All we like sheep have gone astray, following in the beaten track of tradition.

VALUATION OF THE BUSINESS ENTERPRISE

W. A. Paton

With the development of large-scale activity, elaborate technical processes, and the corporate form of organization the business enterprise has become in many cases a highly complex economic institution, and the valuation of the facilities and conditions of production in terms of the enterprise in its entirety is accordingly a bafflingly difficult problem, a problem which comprehends substantially all phases of accounting analysis and all types of value determinations. The business enterprise, it is scarcely going too far to say, is truly an organic entity, a something capable of being contemplated for its own sake and valued in its own right. The enterprise in other words, and as has often been pointed out in utility valuation cases, is an integrated, functioning, continuing establishment, and not a mere bundle or aggregation of separate elements or parts. And the value of the enterprise, it follows, may be more or less than the sum of the values of the constituent factors, considered singly, in apparent violation of one of the more obvious mathematical axioms. Further, in view of the extent now-a-days to which both small and large blocks of securities evidencing enterprise ownership are transferred from one party to another, including the practices of acquiring whole businesses through merger and consolidation, to say nothing of the matter of proper periodic measurement in the interest of the various equities, it appears that there is some excuse for urging that more systematic and discriminating attention be given to the question of enterprise valuation as opposed to other forms of appraisals.

Speaking broadly there are two main approaches to the problems of valuation in business:

1. Cost
2. Income

The cost avenue to value has two divisions labeled on the one hand "original" or "historical" cost and on the other "replacement" or "reproduction" cost, either of which may be modified by estimates of depreciation or other forms of expiration. It needs to be emphasized, however, that all varieties of cost measurement are in essentially the same pew. That is, there is no basic divergence of doctrine between those who glorify actual cost and those who are enthusiastic for replacement cost; in both cases the search is for cost, with disputation arising only with respect to the question of what constitutes the proper method of expression or measurement. Incidentally, there is some truth in the paradoxical observation that the replacement cost school is insisting upon the use of cost values more emphatically than is the historical cost school, since replacement cost is of course likely to express actual economic commitment or sacrifice in terms of current dollars more closely than does original recorded cost. The second approach, the income route, accepts the view emphasized by many economists to the effect that present values of production facilities and other objects of valuation represent the sum of the values of the uses or results which may be expected to flow from such facilities or objects through the term of their effective existence, appropriately discounted to date.

This statement may seem to oversimplify the situation somewhat, particularly in that it makes no definite provision for liquidation or salvage values and a number of other special problems. The writer believes, however, that all so-called bases of valuation and types of values can reasonably be listed under the two general heads indicated. The enterprise under consideration in this discussion, it may be added, is the typical going concern, not the business on the verge of liquidation.

The emphasis upon cost values in accounting is inevitable. The accountant's raw material are particular transactions and relationships, and the values of the enterprise he is serving first come to his attention for the most part in the form of explicit costs attaching to specific factors and facilities. It is the accountant's function, to begin with, to assist in the process of effective internal administration of the business, and this evidently requires the tracing of the funds of the enterprise as they become represented by definite terms and classes of materials, equipment, etc. Further, the accountant must concentrate upon costs for the reason that no other approach is practicable in the majority of situations with which he must deal. It may be entirely proper as a matter of underlying theory, and may even be helpful in the formulation of policy, to conceive of a specialized factory machine as the embodiment of the series of uses which the machine may be expected to yield during its economic life, and to view the value of the machine at any point of time, correspondingly, as the amount of the prices of such uses, discounted to date; but it is surely quite obvious that conditions are seldom such as to make it feasible to measure machine values in this manner for the purpose of making records and reports. A specific productive facility can not, as a rule, be interpreted as the equivalent of an interest-bearing contract with the customers of the enterprise. All we know about the economic character of the machine is its cost at various points of time coupled with facts as to its use and condition. The business concern in acquiring a unit of equipment of course assumes that there is at least a reasonable expectation of profitable utilization, but there is no precise matching of a discounted series of incomes with cost in reaching a conclusion. It is recognized that each productive facility, as an element in a complex of factors, should make its contribution to business income, but it is also recognized that it is usually mere assumption to assign any particular segment or amount of business income as realized to the specific facility. Even our cost accountants —who have more nerve in general than anyone else in the accounting field—do not attempt this hopeless task. The gap between enterprise income in a particular period and individual contributing factors is too wide to be bridged by any scheme of accounting, however elaborate. And even

were this problem to be met successfully it would still leave us with the difficulty of estimating the future incomes of specific factors! It may be added that any interpretation of business assets primarily in terms of income concepts is bound to be unsatisfactory and inadequate for purposes of accounting.

When, however, interest is shifted from the value of the particular facility to that of the going concern as a whole the significance of the cost approach fades appreciably and income assumes a position of importance. It is precisely at this point, in fact, that the contrast between asset valuation and enterprise valuation lies. The business enterprise, not the particular facility, is the essential unit in terms of which business income blooms; it is the enterprise, not the individual asset, which produces profits in our system of organization. This is not to deny that earnings may sometimes be reckoned departmentally and that some enterprises in the strict legal sense may not be significant units for income measurement. The enterprise, a conglomerate of facilities, has no value in itself except that which flows from its power to earn. The valuation of the enterprise, accordingly, is essentially the problem of estimating and discounting enterprise income; and the bare statement of the problem gives an indication of the difficulty of dealing with it effectively in actual affairs.

In the case of an established business the first step is a study of past earning records. In this study the period considered should be neither too long nor too short. A period of less than three years is probably too brief, as a rule, to throw much light on prospective earning power. For one thing the difficulties in the way of measuring periodic net income, familiar to all accountants, are so great as to make it unwise to place great faith in a short-term picture, however carefully limned. In this connection one cannot but marvel at the effect on stock-market prices of the announcement of the earnings of a single quarter. Apparently in speculative circles the tendency is naïvely to project the "latest dope," either good or bad, into the future in perpetuity. On the other hand, in our continuously changing economic fabric, it is to be doubted if a record of greater length than ten years, at the most, augments our powers of divination. It is cold comfort for the common stockholders of the Illinois Central Railroad, for example, to recall that their enterprise had an unbroken dividend record from the 1850's to the 1930's, as this fine showing augurs very little for the future. The trends evidenced in past performance, especially where persistent, are of course important in estimating future earnings, although here too caution must be exercised. The widespread notion that long-continued trends in human affairs may be expected to be forever maintained is in general without much foundation, whether the subject be divorce rates or profit rates. Further, in studying past profit records for the light which they may throw upon the future, scrutiny of valuation and accounting practices is important. Recorded net earnings are notoriously unreliable and of varying significance depending upon the circumstances of their determination. Among matters requiring special attention in this connection are: (1) treatment of organization and developmental charges; (2) inventory policies; (3) maintenance and depreciation, depletion, and amortization. The subject of unusual losses and profits, and of changes in the nature of the activities of the enterprise during the period under review, should also be investigated.

For a new enterprise there is of course no earning record to serve as a guide in valuation. In this situation, however, helpful data may sometimes be gleaned from the past records of other concerns engaged in the same or a similar line of activity.

The second step is the translation of the record of the past, carefully studied and interpreted, with proper weighting for trends, and tinctured by judgment in the light of plans and prospects, into an estimate of the earning power of the future. To begin with the effort should be directed to setting up a range of estimates within which earnings will probably fall for a limited period of say five to ten years. Here is the crux of the problem, and in the nature of the case the estimate

prepared often can be little more than intelligent guesses. Even when dealing with stable industries and very strongly situated companies, it is not safe to be too positive as to forthcoming events and especially as to that very special construction of coming events—the net earnings of the particular enterprise. The need for conservatism at this point is so great as to suggest that the public accountant has the ideal temperament for the task of making these estimates. Presumably this step will involve the preparation of underlying calculations of the volume of business and expenses, taxes, and other deductions, in more or less detail, care being taken to make proper adjustment for the increasing or decreasing charges which may accompany changes in gross revenue and methods of production.

Assuming that a range of careful estimates of future earnings has been compiled, the task arises of converting these data into a judgment as to present value or worth of such earnings to an interested buyer. In this connection it is necessary to raise the question of the proper definition or conception of net enterprise income for the purpose in hand. There are two main possibilities (and a number of minor variations, which need not be listed here). On the one hand earning power may be expressed in terms of the final amount, after all charges, accruing to the residual proprietary interest, in general that of the common stockholder in the case of the corporation; on the other hand earning power may be stated from the managerial, all-capital point of view, the point of view of the enterprise in its entirety as an economic institution. In attempting to value the enterprise, the first conception is not fully satisfactory, and this is true even where the final definite object of valuation is the common stock. The value of the enterprise as a whole, which must be estimated as a preliminary step in placing a value on the stock, is not affected by the nature of the sources of the funds supplied, by the form of capitalization, except as it be assumed that continuity of operation is jeopardized by the nature of the rights of those who supply the requisite economic capital. It must of course be granted that the value of the stock in a particular situation may be affected by the financial structure of the enterprise, but it may still be insisted that the significance of "trading on the equity" is a special and subordinate fact. Borrowing business capital is really an acute form of speculation in the value of money, and in general there is little relation between the worth of a shoe manufacturing business, for example, and the value of the ability to secure creditor-capital. The writer believes, incidentally, that the possibility of increasing earnings on a residual interest through the issue of bonds and preferred stock is more limited than has often been assumed, and that where such possibility exists it is usually a very temporary phenomenon.

The treatment of taxes, particularly income taxes, is a special problem here. From a strict management standpoint it may be argued that the net earning power of the enterprise includes the amount which is produced, after due allowance for all costs of operation, as the share of the Federal Government and any other governmental units levying upon earnings. However, from the standpoint of private capital the value of the enterprise as a producer of taxes is not subject to purchase and hence may be ignored. A more serious complication concerns the treatment of the capital represented by the current creditors not explicitly entitled to share in income. It seems fair to assume, in general, that implicit interest on such capital, at the prevailing commercial-paper rate, is buried in operating charges and that an adjustment is in order by which the estimated amount of such interest is included in earning power as otherwise determined.

The next step is a critical appraisal of all the tangible assets of the enterprise as they stand at the time that the value of the enterprise as a whole is being determined. It would be rather pleasant to us as accountants if some way of avoiding this ordeal could be found, but it is indispensable, as I shall try to show later. Book figures may be reasonably satisfactory for current assets, but the recorded data of fixed property are usually inadequate for the purpose of a

qualitative analysis of earning power. As to how such an appraisal shall be made no suggestions will be offered here beyond indicating that the general approach should be that of a prospective buyer who sees the enterprise in its present setting and who is assuming that operations will be continued in an effective manner. The appraiser must of course bear in mind the purpose of the valuation and make special adjustments for non-operating assets or property which for any reason cannot be expected to have an effective bearing on future activity.

Finding the "reasonable" or "fair" or "representative" or "significant" rate of return for economic capital under the conditions prevailing in the particular industry, a further requirement of enterprise valuation, is a troublesome matter and at the best nothing more than a rough estimate or range of estimates is possible in most situations. Even to define reasonable rate is not easy. It is obviously not the average of existing rates under similar conditions; it is presumably not the lowest rate that appears to be holding capital in the field. Probably the proper conception of the rate of return to be used in capitalizing earning power as a basis for determining a fair bid for a business enterprise is substantially that commonly employed in utility rate cases—a rate sufficient to maintain capital in the particular field and to attract additional funds as needed for the normal growth of the industry, in view of all the conditions recognized as attaching to the particular situation —with a little margin added to be on the safe side. Fortunately there are sufficient data available in government publications, trade association compilations, and elsewhere with respect to rates of return experienced by various enterprises and groups of enterprises to make it possible to avoid blind guesses. Needless to say, care must be taken in interpreting reported rates and in making use of such rates in a particular valuation project.

Comparison of estimated average future earnings with the average amount of tangible assets which it is expected will be associated with or required in the activities leading to such earnings is next in order. If the amount of such assets, at the significant rate of return which has been determined, more than absorbs the estimated earning power, the estimated value of the enterprise is less than the amount of the so-called tangible facilities, even if it be assumed that the work of appraising tangibles has been done with the utmost of care and discrimination. In this case the maximum bid which can reasonably be made for the business is the present value of the average estimated earnings in perpetuity capitalized at the estimated significant rate of return. If on the other hand the estimated average earnings are more than sufficient to clothe the tangible assets with adequate earnings, we are confronted with superior earning power, or a condition of intangible assets, and the measurement of the present value of such anticipated differential income must be undertaken.

Before proceeding with a discussion of the final stage in enterprise valuation, a number of "accrued" complications should be noted. Often the earnings of the future, like those of the past, may be expected to appear as a fluctuating series rather than as a stable stream. The assets to be associated with the various periodic increments of income may likewise be assumed to vary somewhat in character and amount. To attempt, however, to take these features into account in the valuation process, other than as elements in rough averages, would be clearly unreasonable in view of the inherent limitations involved. It should also be remembered that in the final computations adjustment must be made for the difference if any between the amount of the average tangible assets assumed for the future and the amount of such assets actually available to be taken over by the buyer. In this connection the matter of non-interest-bearing current liabilities may again be referred to. If the estimated future earning figures employed do not include an allowance for the implicit interest on the average of such liabilities assumed for the future, the average amount of the tangible assets used in the calculation of differential earning power should be reduced by the amount of such liabilities.

Another complication is the matter of excess working capital. It is a familiar fact that a concern may possess items of plant which are in whole or in part unutilized or ineffectively utilized, and assuming that this condition may be expected to persist such assets, even if they are to be taken over at salvage value, should not be considered in the qualitative measurement of earning power. Similarly an enterprise may have a large backlog of purchasing power in the form of marketable securities and bank balances which can hardly be said to be effectively employed, in total, in the main activities of the business. In such circumstances an estimate must be made, as in utility valuation cases, of the amount of working assets which can reasonably be assumed to be required in connection with the realization of the estimated income in the future. Then in estimating future earnings any income earned on excess current resources should be excluded, and if the excess resources are actually to be taken over in the acquisition of the business a corresponding amount must be added to the estimated fair purchase price as otherwise determined. The estimate of working capital required, it may be added, should be liberal and should recognize the need of substantial cash reserves. A reasonable cash balance, under the circumstances which make it good management to maintain such a balance, is as productive and as vitally connected with operations as the necessary stock of raw materials.

Let us now return to the question of the valuation of differential or superior earnings. The first consideration to be emphasized is the fact that earnings in excess of a reasonable rate of return on the tangible assets to be employed are likely to persist for only a short period, or, to put the matter more pointedly, that an investment can safely be made in anticipated excess profits only on the basis of a very conservative judgment as to the duration of such profits. There is such a thing as competition, and the hazards of business operation in other respects are commonly very real. Long-standing exceptional profit rates—ignoring those artificially produced by arbitrary treatment of assets and expenses—are a rarity. Further, the persistence of superior earnings in a given case may be due not to the conditions and factors which were present a few years before when the business was acquired, but to new circumstances and developments; and while a buyer may reasonably be willing to pay in cash or equivalent for the peculiar momentum which a business has achieved to date, he is not justified in investing in future earnings which may result from conditions not present at the time of purchase, especially where these may require additional effort and expenditure later. Accordingly the layer of anticipated excess earnings, isolated as outlined above, should in general be given a life of five years or less.

What rate should be applied to the series of estimated differential incomes in discounting the series to a present value? The reasonable rate applicable to tangible asset requirements, or a rate commensurate with the greater risk which may be assumed to be involved? If the duration of the top layer of earnings is very conservatively estimated, it might be held that the investment in such earnings is no less secure than the investment in the layer matching the tangible assets and that the same rate of return may therefore be assumed in both cases. On the other hand, there is something to be said for the view that excess earnings are always more perilously situated than normal incomes and that a double dose of conservatism is desirable in estimating amounts which may reasonably be invested in prospective earnings of this type. From this standpoint the application of a substantially higher rate in the process of discounting the top layer is justified.

In these comments on the process of valuing the enterprise the view is accepted that the so-called intangible assets—Canning's master valuation account—represent merely the excess of the value of the enterprise as a whole over such part of this value as may be imputed to the recognizable or tangible assets. According to this view, in other words, the intangibles are the reconciling element between the sum of the values of the business taken in terms of definite objective elements,

item by item, and the value of the organized institution. The view has also been accepted that intangibles are based on a residuum of income, that no intangibles exist where the entire earning power is absorbed by the ordinary assets. It is of course theoretically possible to conceive of a business (as the Board of Tax Appeals seems to have done in a few cases) which has an earning power of less than a reasonable return on assets and which nevertheless has actual intangible values, but this means the exclusion of active and necessary assets from normal relation to earnings and appears to be an unworkable approach. One of the many natural sequence assumptions of accounting is that which considers income as first to be imputed to capital requirements as reflected in typical assets and second to imponderable circumstances and conditions inhering in and focusing upon the particular enterprise in its peculiar setting.

(This statement of the situation may be objected to on the ground that it draws too sharp a distinction between tangible and intangible assets as ordinarily understood. As Professor Hatfield has pointed out, even land might be viewed as an intangible since land ownership consists simply of certain rights granted with respect to the use of a specified portion of the earth's surface. It is no doubt true that such definite factors as franchises, patents, and other recognizable monopolistic privileges may be independent objects of valuation under some circumstances and may be assumed to have a relation to earning power not utterly different from that indicated for the tangible assets.)

In concluding this rough outline I would like to emphasize the fact that the measurement of intangibles, the appraisal of corporate securities,[1] and the valuation of entire business concerns are essentially a single problem. In each case the same estimates are required, the same factors must be considered, the same computations must be made. Further, an appraisal of tangible assets is a necessary part of the process, particularly in connection with the qualitative interpretation of earning power.

May I also emphasize the need for more critical and conservative appraisals of business concerns both in connection with outright purchase and sale of entire enterprises and in connection with investment activities as exemplified in the organized markets for securities and elsewhere. Certainly careless overevaluation was in evidence on every hand during the so-called boom period of 1925–1929, and the inclination to don the rose-colored glasses is again apparent in financial circles. In many of the cases of merger and consolidation, of course, the nominal price paid for constituent companies was not on a cash basis, and the inflation was accordingly more apparent than real; nevertheless the actual prices paid—especially in terms of the market values attached to the new securities issued—were often ridiculously high. No wonder that the owners of a host of small, local corporations were tempted to dispose of their companies to those who were quite sure that two plus two was much more than four!

COMMENTS ON PROFESSOR PATON'S PAPER BY S. J. BROAD

Professor Paton's paper is a thoughtful and thought-provoking summary of the approach which must be made in appraising the value of an Industrial Enterprise. He has not exaggerated the difficulties and I am sure that, in the time allotted him to cover so important a subject, he has had less difficulty in determining what to say than in deciding what to leave out.

In dealing with a subject such as this it seems to be customary to start with a definition. What is "value"? Dr. Seligman in his "Principles of Economics" defines it as follows:

> Value is the Latin term corresponding to the Saxon "worth." The fundamental idea which underlies worth is capacity to satisfy a want. If we need a nail and find a broken one, we say that it is worth nothing—that it is valueless, or not valuable, for our purpose. Value, or worth, thus implies usefulness or utility . . .

[1] It is recognized that the market value of a stock in a particular company may be affected by the dividend policy, and various other factors not given attention here.

As a preliminary definition, then, we may say that the value of anything is the expression of our estimate of its utility, meaning by utility its capacity to satisfy human wants.

Value is then a matter of judgment—"our estimate." It is both subjective and objective—subjective because it is influenced by the existence of human wants which are extraneous to the article; objective because the ability to satisfy those wants depends on the capacity and condition of the article itself.

In measuring the value of an industrial enterprise I am inclined to think that the subjective approach to the problem is of even greater importance than the objective. To make my point clear let me use as an example a very simple form of property—real estate—and illustrate by reference to an imaginary piece of property, say on the lower East Side of Manhattan Island.

If we go back far enough we can visualize an attractive countryside, green grass, hedges and a few trees. The land, if used, was of value for cattle-grazing or, perhaps, as the scene of Sunday evening strolls. As time passed the town spread northward; attractive residences were built with plenty of land around them. People continued to move north, the limited amount of land available necessitated increased utilization of what land there was. Values went up and with them perhaps taxes. The owner was forced to sell part of his plot as the limited use of it for a single two-story residence was uneconomic. Several houses were built on the land formerly occupied by one.

Our attractive residence, though constructed to stand the ravages of time, was no longer suitable to the changed conditions. It lost value as a residence as stores and factories moved into the neighborhood. All this time the land was the same land but it had increased tremendously in value; the residence had declined. To make greater utilization of the space possible, buildings of several stories necessarily took the place of the two-story residence. The land reached its zenith but with the movement of population still further north fewer people passed the stores, or perhaps the economic status of the neighboring population changed. The rental value of the property decreased as its utilization declined and the land went down in value as a result.

I have used this example to bring out the point that intrinsically the land and our original residence remained the same but their values went up or down relatively to the degree of utilization to which the land could be put and the ability of the building to provide that utilization. If the building did not measure up it became uneconomic and lost value. Objectively the property was unchanged but subjectively its value was dependent on ability to render service or utility and this in turn was measured in terms of money by earning power, the return expected to be realized from the use of the property.

Real estate is a simple form of capital; but the same underlying principles of valuation apply to industrial enterprises. As Professor Paton has pointed out, the physical elements of the properties and their intrinsic value are only one, and not the most important, consideration. The cost of replacement value of the properties of an enterprise may be considerable, but the enterprise as a whole possesses value only in proportion to its ability to supply human wants and thus create reasonable and continued profits. In an attempt to measure this ability numerous factors, physical, economic, and social and human, must be taken into consideration, and I shall attempt to state some of them.

Among the physical factors are:

1. The condition of the property;
2. Its ability to continue to produce economically and efficiently from a competitive standpoint;
3. Various engineering questions such as whether the plant is designed so as to facilitate future enlargements; the modernness of apparatus and appliances and their adaptability to changes in technical processes;
4. The location of the plant in relation to raw material supply, to labor supply and to markets. For example, a company manufacturing scientific instru-

ments would, other things being equal, have a better chance of continued success in Rochester than in Atlantic City. Some of the best fruit-producing land in the world is located in the interior of British Columbia, but owing to the distance from large markets its value is much less than that of poorer land elsewhere.

Economic factors are no less important. The position of the industry in relation to competing industries and competitive conditions within the industry itself; the possible effect of changes in local taxation or in tariffs, on the costs of raw materials and products; the organization of the industry as to price control and labor relations; any or all of these may have an important bearing on the continued profitableness of the enterprise.

Some of the most far-reaching and fundamental conditions relating to an industrial enterprise in our complex modern civilization are human and social in their nature. Every successful business must have a sound reason for its existence and that reason is found ultimately in the satisfaction of human wants. But wants change, as do the habits of a people. The importance of such changes is seen in the effect of fashions on the cotton, silk and rayon industries and the shifting of business from one to the other. Again the increased use of automobiles has had an important bearing on the earnings of railroad companies.

Another important human factor is the quality of the organization itself. Andrew Carnegie claimed that his organizations were worth more to him than his plants. The best-geared business must have motive power and that motive power is supplied by management both directly and by the permanent impress which management makes on the organization, an impress which will continue to last even after the management itself may have changed.

It may perhaps be a fair comment to make that the various factors to which I have referred are already reflected in the financial statements of an enterprise and particularly that the effect of these factors will have shown itself if the earnings over a period of years are considered. That is true; but only to a limited extent. Many of the changes are gradual and their effect may not be noticeable for some time. Financial statements are a reflection of the past; they are primarily historical. It is when they are used as a measure of the future (and financial statements reflecting the part are too often used naively for this purpose)—it is when they are so used that changing or changed conditions may sometimes make them inadequate if not actually misleading.

Moreover historical statements merely reflect the effect of changes that have occurred or are occurring. Value as a measure of future utility must be projected into the future in an attempt to weigh the effect not only of changes which have taken place but of those which are likely to come. There is a large element of the unknown. Civilization is not static. Processes change; habits change; economic factors such as tariffs or government regulation are subject to sudden change; and any one of many human or physical or economic changes may throw the enterprise into difficulties or materially alter its financial condition and earning capacity. While confidence in the ability of the organization and its management to keep pace with normal changes is an important element in any appraisal of the value of an enterprise some conditions are outside the control of management and may render it impotent.

While I have emphasized extraneous factors which may have an influence on the earnings and, therefore, on the value of a industrial enterprise I do not wish to leave the impression that I think that asset value and physical condition are unimportant, or that past performance should not be used as a guide to the future. On the contrary adequate plant investment, a sufficiency of working capital and proper capitalization are essential to the continuation of the enterprise and their existence can only be determined by reference to the balance sheet. Earning power, moreover, is of crucial importance for valuation purposes and past performance *must* be used as a basis for measuring prospective earning power. My

point is that other factors which may have an important effect on the continuance of the earnings should also be taken into consideration.

It must be admitted that it is not possible adequately to set forth in financial statements the various conditions under which an enterprise operates or to show what has been their effect on its operations. Particularly is it necessary to point out that financial statements, prepared and presented as a historical review or accounting by the management, do not purport to contain much of the information necessary in making a valuation of the enterprise. It is well that this should be understood by the investing public. Financial statements are probably the most effective means by which to measure the competence of management and the progress made from year to year but for investment purposes information is also necessary on other matters. It would be unfortunate if the present trend in security legislation should lead investors to place their full reliance on historical financial information as a guide to present values or to future earning power, to the extent, perhaps, of minimizing the importance of other influences or of believing that losses on investments can be eliminated.

An industrial enterprise is much like a ship. The ship may be well constructed, her cargo carefully stowed and her navigation perfect. She may be sailing a well-charted sea in all serenity. But suddenly a cloud appears on the horizon, a storm arises, the ship is buffeted and beaten. She may be thrown off her course, be delayed or possibly disabled. If the storm is severe enough she may, perhaps, be wrecked. So with an industrial enterprise.

Accountants, I believe, have a duty to educate investors and the public generally so that they will realize the true value of financial statements, but retain a proper perspective as to their unavoidable limitations. From a long-range point of view accountants will not promote their own interests by encouraging unwarranted views as to the efficacy of the statements. Financial statements *are* of prime importance; but we should not claim that they will give the investor all the information that he needs to have in appraising the value of an industrial enterprise or that the most complete and honest financial statements can prevent investment losses.

STOCK EXCHANGE LISTING REQUIREMENTS, AND PUBLICITY

Frank P. Smith

A. SCOPE OF LISTING REQUIREMENTS

Stock exchange listing requirements in the United States, prior to 1934, were formulated by individual exchanges, each exchange acting on its own initiative and authority. This had been the practice of American stock exchanges since listings first began to be important in the 1860's. The great London Stock Exchange followed the same practice and still decides such questions according to its own rules. In contrast are the Continental exchanges, such as the Paris Bourse and Berlin Bourse, which have had listing requirements, formulated by legislative bodies, imposed upon them for administration.

The practice of having varying types of listing requirements on the part of different exchanges has led to abuses and laxities, both in the enactment and in the administration of such requirements. These variations can not be considered here but it is sufficient to state that such variations existed to an extent sufficient to justify legislative action The legislation intended to correct these defects is included in the Securities Exchange Act of 1934. Two separate measures have been taken: (a) exchanges have been classified into two groups, "exempted" and "registered," and (b) uniform listing requirements have been prescribed for each group. The experiences of the past in this country, in

England, and on the Continent were considered in the drafting of this legislation, but the provisions of the Securities Exchange Act of 1934 cannot be directly compared with foreign legislation for the regulation of exchanges.

The provisions of the Securities Exchange Act of 1934 relating to listing requirements do little more than direct the administering Commission to establish uniform requirements. Certain restrictions are imposed by the Act, but the drafting of such listing requirements is largely left to the discretion of the Commission.

The problem of the Securities and Exchange Commission with respect to the listing requirements of exchanges may be divided into three distinct parts: (a) the Commission is constantly faced with the problem of deciding how much information is needed and how far it may go in demanding such information; (b) the Commission has been instructed to prepare "forms" which will embody the specific questions to be answered by applicants; and (c) the Commission may supervise the work of listing committees of the individual exchanges. This latter power is limited, provided exchange officials carry out the terms of the Act. However, Section 19 authorizes the Commission to deny registration to a security, but only after a notice and an opportunity for hearings have been given.

The purposes of listing requirements are commonly misunderstood, and the usual error is that of attributing to them regulatory powers which they cannot possibly possess. So far as a formal statement of the aims of listing requirements is concerned, the following three points cover the underlying purposes of both the actual requirements and the work of listing committees:

1. To further the aim of creating a free and open market;
2. To provide assurance of the genuineness of the company issuing the security, and of the genuineness of the particular issue listed;
3. To provide information for dealers, speculators, and investors in securities.

Possibly all three points listed above might be included under the first point, namely, the creation and maintenance of a free and open market.

An open market[1] implies that all the information essential to an immediate judgment of a security issue is available to all persons who buy and sell securities. Details regarding the legality of the issue and of the company would be included under this heading as well as facts relating to the financial set-up and history of the company.

The activities of the listing committee of any stock exchange are, and have been, rather closely restricted. Assertions are made to listing committees by persons interested in securing trading privileges for certain securities. The group presenting the applications take, practically, the role of a seller. The stock exchange is not, of course, buying the securities. However, it is, through the activities of its listing committee, weighing certain features of the company and of the particular issues involved. The persons seeking application, as a consequence, attempt to meet the conditions laid down by the list-

[1] When markets are considered in a general sense, the argument that free markets involve publicity may be denied. The markets for many kinds of commodities may be open and free, in the general sense, and they may be conducted with little, if any, publicity. In such cases the commodities which are being sold are available for examination. Further, the commodities can be examined by experts, on the basis of physical appearance, and fairly accurate conclusions can be drawn. In such cases publicity would have the result of attracting possible buyers and sellers to the market—in other words, would serve as advertising, but would not enter into the reasoning of experts.

The evaluation of a stock certificate, on the other hand, is based partly on publicity and partly on forecasts which are, in turn, based on publicity. Publicity, in this sense, means the publication, or at least the presentation to stock and bond holders, of certain essential information. This information is of three types: that concerning current operations, that concerning current financial position, and that concerning unusual occurrences reflecting on a company's position and future operations.

It is, practically, impossible for an investor to make an examination of a company which would correspond to the examination, made by an expert, of commodities. Such an examination of a company would entail exhaustive researches by engineers, accountants and lawyers. In lieu of such first-hand information investors and traders rely on the information published by the particular company under consideration. When this information concerning operations, financial conditions and unusual occurrences is not made public, there is little likelihood of an open market developing in the securities of that company.

ing committee, and this committee has very little power or desire to investigate the truth or falsity of such claims.

Details concerning the legality of a company and of the issue for which application is being made will serve as an example of the difficulties which an exchange would meet, should it attempt to make direct investigations of statements contained in a listing application. For the listing committee to determine, independently, the validity of such an issue and of the issuer would involve detailed investigations by lawyers and other experts. Instead of such an independent confirmation, the exchange accepts statements by officers and counsel. If such statements should be false the exchange does not consider itself liable for negligence, since the listing committee accepted the assertions of the company officials, supported by opinions of competent counsel. Any action for recourse would need to be taken against the company listing the securities.

The work of listing committees is intended to further the operations of open markets in the interest of investors, traders and speculators. Listing committees have taken the stand that their listing requirements operate to protect investors and others through permitting only legally formed companies to list legally issued securities, et cetera. At the same time it has been pointed out that the power of listing committees actually to investigate issues offered for listing is sharply limited. Listing committees are not responsible for the authenticity of reports and statements beyond requiring opinions of reputable and able persons.[2]

The investigation into the operations of the New York Stock Exchange's listing committee, which was conducted by a Senate Committee, 1933–1934, uncovered several instances where this listing committee had quite obviously not administered its own requirements. The testimony heard before the Senate Committee has been given wide publicity and the details of the various cases need not be given here. One of the important cases involved an issue of shares of American Commercial Alcohol Corporation[3] which was listed during the summer of 1933. Part of this issue was to be used to pay for stock of a newly formed company and no balance sheet of the new company was called for. The investigators pointed out that a balance sheet of the new company was in the hands of the Exchange officials before the issue was finally listed but was not brought to the attention of the listing committee. This balance sheet was of such nature that it would (or should) have placed the committee on its guard and the issue perhaps would not have been listed. Another case in which the listing committee was found careless was a listing of an issue of General Theatres Equipment, Inc., which involved a mark-up of $26,000,000.[4]

The methods mentioned above have not been materially changed with the passage of the Securities Exchange Act of 1934. The "forms" of the Commission require certain questions to be answered, and the answers to these questions will be sent to the exchanges on which listings are sought. It is true that the Commission's forms represent more searching inquiries into the history of companies than did most of the listing statements in use prior to 1934.[5] However, the actual work of checking sworn statements

[2] This was particularly true, prior to 1934, when an application was made for an additional rather than for an original listing. In the case of an additional listing of Commericial Alcohol Corporation stock, the Chairman of the Listing Committee of the New York Stock Exchange, Mr. Frank Altschul, testified as follows: "In the case of an application of this sort, . . . the questions that are asked by the committee of the executive secretary, who has all of the documents in charge, are to determine whether all of the papers have been placed on file, whether the opinion of counsel is in order, whether the documents that have been filed with us substantiate the printed material that is in the listing application." Reported in Hearings before the Committee on Banking and Currency, United States Senate, *Stock Exchange Practices* (1934), pt. 13, p. 5965.

[3] See testimony of Mr. Frank Altschul, reported in Hearings before the Committee on Banking and Currency, United States Senate, *Stock Exchange Practices* (1934), pt. 13, pp. 5963–5975.

[4] See testimony of Mr. Harley L. Clark, reported in Hearings before the Committee on Banking and Currency, United States Senate, *Stock Exchange Practices* (1933), pt. 6, p. 3201.

[5] The information required by the Commission corresponds closely to that formerly required by the New York Stock Exchange and the Chicago Stock Exchange. Remunerations to officers and directors and details of underwritings are the important additions to the requirements of these two exchanges.

still devolves on listing committees of the individual exchanges and it is as difficult for a listing committee to determine the validity of companies and of specific issues under the provisions of the Securities Exchange Act of 1934 as before.

American laws are frequently criticized and European methods eulogized as superior to our own, and this is particularly true in the matter of forming companies. So far as listing requirements are concerned, the existence of more or less stringent regulations concerning the formation of companies is of little importance. Individual exchanges, prior to 1934, and the Commission since that date, require certain documents to be presented indicating the legality of an applicant company. Thus Section 12 (2) of the Securities Exchange Act of 1934 requires that "Such copies of articles of incorporation, by-laws, trust indentures, or corresponding documents by whatever name known, . . ." be presented ". . . as the Commission may require as necessary or appropriate for the proper protection of investors and to insure fair dealing in the security." There is no requirement that the listing committees do more than administer the actual demands of the Commission as set forth in the various "forms."

The method of checking on the legality of companies and issues by exchanges, as mentioned above, corresponds to the methods used abroad. In England, for example, companies are organized and operated under the fairly stringent provisions of the Companies Act, 1929. When companies apply for official quotations on exchanges they are asked to submit documents indicating their compliance with the terms of the Companies Act.

Much the same procedure is used by French and German exchanges as that mentioned in the case of English exchanges. Companies are formed and operated in France and Germany under governmental regulation and, when applications to list are made, exchanges demand documents which show that the applicants have complied with the provisions of their respective company laws. Thus there is seldom any independent verification of the legality of companies or issues and the work of listing committees is confined to securing copies of certain documents. The fact that the laws regulating the formation of companies are either lax or strict causes no change in the procedure of listing committees. The same documents are required in either case.

B. PUBLICITY FOR LISTING APPLICATIONS

Objections arise to the procedure outlined above because of the publicity which attaches to listing applications. Certainly, the publication of facts concerning the securities listed on exchanges and concerning securities for which application is being made is one of the most important functions of stock exchange listing requirements.[6] The appraisal of securities necessarily depends on information and an exchange can only hope to maintain an open market through the publication of facts concerning the securities traded on that particular exchange.[7] The fact that information is essential to an open securities market can hardly be disputed. The point at issue relates to the agency whose duty it is to furnish this information.

If we assume that information is essential to an open market, and if we assume that the information which is needed is a complete statement of facts regarding listed companies, then it seems that corporations should furnish the necessary information to interested parties and to the public. It is at this point that the argument breaks down. The officials of the majority of companies in the United States have displayed a singular reticence with respect to the operations of their companies. This reticence, in most cases, is based on the fear of competition. Corporate officials admit, as a theoretical question, the right of stockholders to be informed of the operations of the companies in

[6] "One of the prime concerns of the exchanges should be to make available to the public, honest, complete, and correct information regarding the securities listed." Senate Report No. 1455, *Stock Exchange Practices* (1934), p. 68.

[7] It is regrettable that more publicity for the operations of companies is not required by the corporation laws of the various states. Few states have provided even for the publication or distribution to stockholders of balance sheets and income statements. The amendment added by Pennsylvania to its corporation law in 1933 is an initial step in this direction.

which they have invested. But, as a practical matter, the officials hesitate to put the facts, in readily understandable form, into statements, because of their fear that competitors will receive and benefit by such information. This feeling has been well stated in testimony before an English committee regarding the publication of balance sheets: such publication would "work an infinity of mischief . . . would deal a death blow to limited liability . . . would give the system such a shock that it would go out of fashion . . . (because a company) could not . . . trade remuneratively if competitors knew its results."[8]

In certain cases the fear that competitors will benefit from information disclosed to stockholders deserves due recognition. However, the fear of allowing competitors information about business organizations does not seem to warrant the general policy of secrecy which has been maintained by corporate officials of the United States.[9]

The situation is that information which is essential to an open market should be supplied by the companies whose securities are listed. The officials of a large proportion of these companies refuse to furnish this information. The result has been that exchanges have taken the initiative and either furnished to the public the information received from the listed corporations or have required, as a condition of listing, that listed companies furnish the information on their own account.

The stock exchanges in the United States are handicapped, in this matter of publicity, as compared with the leading foreign exchanges. In England, for example, the publicity which is to attach to the formation of companies and to their periodic reports is furnished through the provisions of the Companies Acts. Thus at least the shareholders of a particular company receive at first hand the information desired for evaluation purposes.[10] However, there are exceptions to this generalization. The Companies Act, 1929, requires full publicity for issues sold to the public and described in prospectuses. Where an issue is sold privately without the aid of a prospectus, and is subsequently offered for official quotation, the London Stock Exchange requires the issuing company to publish, in the form of an advertisement, certain facts prescribed by the Exchange. This latter form of publicity compares, to some extent, with the publicity afforded the public by American exchanges, although American listing statements are merely furnished to newspapers and journals and excerpts or digests quoted. American exchanges do not require that listing statements be reproduced in advertisement form.

The regulations of the Berlin Bourse offer another illustration. The applicant is required to publish in specified journals the listing application and prospectus accompanying the application. However, the information included in such publications largely relates to the formation of the company, rather than to the financial operations of the company, or its situation at the time of listing. This method has severe limitations, but such limitations are to be found more in the choice of items advertised than in the manner of publication.

The information which is included in a listing statement, under the regulations of the Securities and Exchange Commission, is very complete. In most cases this information is also voluminous and the task of preparing copies of the listing statement for distribution to the public would represent a great expense. The statements are likewise too large for publication in the form of advertisements. The Securities Exchange Act of 1934 provides, at the discretion of the Commission, for the publication by listed corporations of periodic reports, but there is nothing in the Act which requires that listing statements be published.

[8] Testimony of Lord Wrenbury before the House of Lords Committee, *Parliamentary Papers IX* (1898), p. 392.

[9] Exchanges have had to deal with this policy of nondisclosure in (1) determining the information to be included in listing statements, (2) in their programs to secure published statements, and (3) in their campaigns to secure more detailed and adequate statements for security holders.

[10] The amount of information given to shareholders of English companies is commonly over-estimated. A brief balance sheet, surplus statement, and meaningless income statement are all that are required.

The task of circulating listing statements to interested parties would be a difficult one, though perhaps no more difficult than the circulation of prospectuses under the Securities Act of 1933. When the importance of listing applications as a source of information is considered, it seems that dealers, speculators and investors might be better informed regarding newly listed securities were they able to secure copies of the listing statements. The same device as is used in the case of the Securities Act of 1933, namely, the distribution of abbreviated registration statements (prospectuses), might be adapted for use under the Securities Exchange Act of 1934. Certainly some method should be adopted whereby interested parties could secure copies of listing statements for a reasonable time after the dates of application.[11]

1. Responsibility for Published Information

Another question which immediately arises, if we assume that exchanges are to take the initiative in the matter of publicity, relates to the quality of the information made public. A stock exchange is not, obviously, in a position to furnish information concerning a company without first securing the coöperation of that company. The information must be furnished the exchange by the company and then made public by the exchange. The question that arises here is whether or not the exchange can fairly be expected to investigate such information before it is broadcast to the public. It is true that exchanges decline to accept any responsibility for inaccuracies which may be present in such information. According to the opinions of exchange officials they act first to convince company officials of the necessity of providing the information and then they take the requisite steps to make this material public. This role involves no responsibility on their part.

The position of exchanges as indicated above appears to be logical, so far as the exchanges themselves are concerned. This conclusion cannot be reached when the individuals who act on this information are considered. No matter how frequently exchange officials may reiterate the statement that they do not certify the information made public through exchange offices, the fact will still remain that many individuals will regard the information as vouched for by the exchange. Quite aside from this tendency is the fact that the publicity operations of the exchange result in disseminating information which might otherwise never have been published. The information thus given out is in the interest of an open market, but there are undesirable results if the information made public in this fashion is false.

An illustration of a foreign treatment of this question is found in the case of the Memphis, El Paso and Pacific Railroad. The mortgage bonds of this company were listed, in 1869, on the Paris Bourse. The bonds were well advertised and placed, and the first three coupons had been paid before rumors caused an investigation. The Paris Bourse discovered that the listing application of the company had been falsified and the highest court of France pronounced the Parquet as negligent in not discovering the misstatements and as liable for one-fifteenth of the total damages.[12]

The adoption, by exchanges of the United States, of the ruling given above would necessitate a wholesale revision of the publicity requirements of our exchanges. Whether or not we would have a freer market as a result can only be conjectured. Under the present system we have a market which is based on the information given out by either the companies or the exchanges concerned. The information which is published through the hands of the exchanges is largely confined to listing statements, while they have been directly influential in securing the publica-

[11] The publication of Rule UB3 and UB4 represents a first attempt to meet this problem. These two rules require that exchanges must permit public inspection of corporate information filed with them and with the Commission under Sections 12, 13 and 16. Naturally a large number of investors will be unable to benefit by this ruling. See Securities Exchange Act of 1934, Release No. 59, December 9, 1934.

[12] Parker, W., "The Paris Bourse," *Columbia Studies LXXXIX*, No. 3, pp. 63–64.

tion of annual and quarterly statements. The listing statements are of great importance as a source of information concerning listed companies, and it might seem that exchanges should accept some responsibility for the information thus made public through their hands. On the other hand it is obvious that exchange officials are in no position directly to ascertain the truthfulness of listing statements and must rely on certified statements of accountants and sworn statements of officers and experts. The publication of periodic statements is likewise left to company officials, accountants and others for verification. The efforts of exchanges have been directed to the end of having periodic statements provided. The exchanges have taken no responsibility for their accuracy, although they have, in the case of the more important exchanges, influenced the style and presentation of reports.

It is difficult to see how the situation described above can be changed under the provisions of the Securities Exchange Act of 1934. The provisions of this Act authorize the Commission to specify, in detail, what information shall be included in listing applications. Listing committees are expected to administer at least[13] the minimum requirements set out by the Act and by the Commission. In addition to this regulation of minimum listing standards the Commission is also empowered to require listed corporations to publish periodic reports, and to prescribe reporting methods to be followed. Additional publicity concerning the operations and financial situations of corporations will, undoubtedly, follow from the required publication of reports. Likewise, additional information should be made public through the use of more stringent listing requirements.

The administration of the provisions of the Securities Exchange Act of 1934 will, in all probability, result in making public a greater amount of information concerning listed companies than has previously been the case. However, this does not solve the problem of allocating the responsibility for the accuracy of the information thus made public. It is true that there will be a greater use of experts and more statements will be certified by experts than heretofore; but this is merely following the same methods used by exchanges prior to 1934. The important point here is that the Commission determines what reports shall be included in listing statements and the required reports are given to exchange listing committees. These listing committees have some new rules to administer but they have no more powers of investigation today than they had previous to the passage of the Securities Exchange Act of 1934. Consequently, we must still rely on statements of officers and directors and certifications by experts for the authenticity of information made public under the provisions of this Act.

Theoretically, stock exchanges, through the work of listing committees, should carry a high degree of responsibility for the accuracy of the information made public through their hands. As a practical question, however, it seems that this responsibility must be thrown back upon the persons who certify statements and furnish information. The lack of investigatory powers of exchanges, even under the Securities Exchange Act of 1934, is the important factor leading to this conclusion, and the existence of this same factor causes this conclusion to be an unsatisfactory one. This situation can be satisfactory only when traders and investors recognize exchange listings for what they are worth and cease regarding a listing as an indication of merit.

2. *Amount of Publicity*

The amount of material made public through the efforts of exchanges has, in the past, varied widely between exchanges. The efforts of the New York Stock Exchange have resulted in a substantial amount of publicity with a smaller quantity of information afforded the public in respect to the smaller and weaker exchanges. The efforts of the Securities and Exchange Commission would have changed this situation. All "registered" exchanges will administer the

[13] Listing requirements of individual exchanges may exceed, in severity, the requirements established by the Commission.

same minimum listing requirements, and all listed companies will be subject to the minimum regulations of the Commission.

The amount of publicity desired is also related to the amount of publicity which the public can use. So long as the reports and statements of companies are presented in technical phrases much of the information which is now being published will not be understood by the majority of interested persons. This can only be remedied by a simplification and standardization of terms and statements.[14]

C. CONCLUSION

Listing requirements rank among the important problems with which the Securities and Exchange Commission is faced. This problem includes not only the securities already registered on exchanges[15] but also the over-the-counter markets.[16] The regulation of the over-the-counter markets is another of the difficult tasks facing the Commission and perhaps some of the securities traded in these markets may eventually be listed on exchanges. Another feature is the increasing amounts of new securities coming into the market.[17] Many of these issues will be registered on exchanges.

The task of deciding listing policies is more than the formulation of questionnaires and forms. There must also be decided how much information can be presented in intelligible form and how much information shall be published. The Securities Exchange Act of 1934 offers, as one of its major accomplishments, the possibility of improved listing practices.

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[14] The Securities Exchange Act of 1934 confers on the Commission the authority necessary to secure such standardization and simplification of reports. Section 13 (b) reads: "The Commission may prescribe, in regard to reports made pursuant to this title, the form or forms in which the required information shall be set forth, the items or details to be shown in the balance sheet and the earning statement, and the methods to be followed in the preparation of reports, in the appraisal or valuation of assets and liabilities, in the determination of depreciation and depletion, in the differentiation of recurring and nonrecurring income, in the differentiation of investment and operation income, and in the preparation, where the Commission deems it necessary or desirable, of separate and/or consolidated balance sheets or income accounts of any person directly or indirectly controlling or controlled by the issuer, or any person under direct or indirect common control with the issuer; . . ."

The Commission has already taken steps to define accounting and reporting procedure both under the Securities Exchange Act of 1934 and the Securities Act of 1933. The New York Stock Exchange has taken a prominent stand, particularly since 1931, in its effort to secure more complete and intelligible reports and has secured the coöperation of the American Institute of Accountants. Much was accomplished through the help of this body. However, the Securities and Exchange Commission is in a position to accomplish far more in the field of adequate reports than could any one exchange.

[15] The total market value of all securities traded on national securities exchanges, including Government bonds, is approximately $100,000,000,000.

[16] Approximately $55,000,000,000 of securities are traded in the over-the-counter market. This total includes securities of states and municipalities.

[17] A total of $665,338,556 worth of securities was covered by registration statements which became effective during the first six months of 1935.

LIMITATIONS ON ASSETS

ARTHUR H. WINAKOR

ALTHOUGH the title of this article would indicate that it is primarily concerned with assets, this is not the case. It is much more directly focused upon the liabilities including net worth, or the equities in those assets. These equities, through their priorities, their contractual restrictions upon the corporation and its assets, limit their use and disposal. They also indicate the participation in the assets as well as their earnings and losses. The true significance and relationships of the equities to the assets, as well as to one another, is usually obscured. Accountants particularly have failed to give due recognition to them. It is the purpose here to state these limitations on assets, to point out their significance, and to show how serious has been the failure of accountants adequately to appraise them in their statements.

As well expressed by recent writers, a sharp and full distinction should be made

between the res and the quantum of assets.[1] The assets as universally stated on the left hand side of the balance sheet indicate the res, i.e., the thing in itself, and also their quantum, or the sum represented thereby. On the other hand, the equities do not represent specific assets, but merely restate the quantum thereof in their sum total so as to indicate the contractual relationships and participation in the given sum of assets. The equities are not tangible. They simply recapitulate, in another fashion, the quantum of the assets so as to show certain quantitative and qualitative characteristics in their use and disposal which could not be shown by the assets themselves. But because specific assets, either in res or in quantum are seldom absolutely and irrevocably dedicated to certain equities, the equities are not related to the specific res. Furthermore, the ordinary balance sheet is wholly inadequate to show the correct or complete extent of this participation or its limitations.

The balance sheet equation, which has at one time or another received a great deal of attention, provides a convenient starting point. The usual form is that Assets − Liabilities = Net Worth, or less frequently, that Assets = Liabilities + Net Worth. It seems, however, that modern-day conditions and practices raise some serious doubts as to any form of balance sheet equation except as an ideal, and even then only under serious restrictions and qualifications. The statements contained in this paragraph will be elaborated and defended in subsequent pages. With these thoughts in mind, attention is now directed to the nature of the equities and their limitations on assets.

First, let us look at some of the items which appear among the current liabilities. Two items stand out from all others, namely Wages and Taxes. By law these are given distinct priorities in the assets over almost any other claims. To this extent, the assets, primarily the current assets, are restricted in their disposition, either for the going concern or otherwise. These priorities, which may extend to all assets, in essence restrict the current assets, and primarily the cash. Accountants do not set these items, which have superiority over others, by themselves to make the imposed contractual relationship clear. Of course, they could not indicate a segregation of specific assets; that is not warranted. They could, however, set such claims as separate and prior accounts. A knowledge of such accounts would certainly be of interest to creditors.

Then there are certain classes of liabilities, which are frequently funded. Thus interest currently payable may be set up as a fund with the paying agent or some bank. Such current obligations for interest will then be payable out of this fund, which in essence is thus a restricted fund. Nor does this relationship always appear in the balance sheet. In a similar manner dividends, either for common or preferred stock, after the declaration thereof, may be funded. A fund of cash, or an account may be created with some depository or agent, which will then assist the dividend distribution. Funds, either for interest or dividends, are frequently of such character as to give a definite priority to certain creditors, i.e., stockholders or bond holders, in their use and disposition.

There are innumerable possible classes of limitations which may be created by current obligations, other than those already enumerated. Contracts in connection with the purchase of machinery and equipment, goods and services, and the usual operations of business units may vary widely; likewise, they may restrict to a greater or less extent the freedom of use and disposal of the company assets. If any of them contain provisions differing at all from the customary open accounts, these restrictions should properly become the interest of the accountant. He should examine them, and he should also disclose them in his statement, thereby giving a more accurate picture of the real value and availability of assets affected.

If part of the current obligations represent claims arising from property purchases or other unusual operations, they may have a material influence upon the adequate and

[1] H. W. Ballantine and G. S. Hills, "Corporate Capital and Restrictions upon Dividends," Accounting Review, Vol. x, No. 3, pp. 246 to 269.

correct statement of the current assets and current liabilities.

Not infrequently certain classes of purchases are "financed" through short term or intermediate term notes. These notes may have special characteristics which limit assets and their disposal. But these are quite similar to those found in certain bond indentures and preferred stock deeds. Hence, a few of the restrictions, common to all of these equities, as a class, may be discussed together. There are many provisions requiring the maintenance of given sums of working capital. Or perhaps these may take the nature of a required minimum of current assets in relation to current liabilities. The net result of these limitations is to restrain the assumption of debt, and also to restrain the dissipation of assets through dividends, or other distributions. Or again, these limitations may take the nature of provisions prohibiting assumption of added debt until certain proportions of the equity in new assets are contributed from net worth, either as earnings retained, or as new share contributions.

In general, it may be said that limitations upon assets and their disposal may be operative through any class of financial items. Nevertheless, in their essence, they usually become limitations which operate through or upon the net worth. The mere fact that they appear in connection with the acquisition of an asset, or in connection with the assumption of some debt, and that nothing is thereby provided specifically for net worth, does not mean that net worth, particularly the common stock equity is not actually affected thereby, or that such is not the intention. Because of the important role played by net worth in restricting the assets, it is proposed to give somewhat more attention to it than has been given to the foregoing items of the equities. Not only will attention be directed toward its limitations on assets, but also to its very intimate relationships with assets. The intimacy of these interdependent relationships also severely beclouds and limits the quantum and meaning of net worth.

As already stated, the most complicated claims and limitations are either found in the net worth, or operate through net worth itself. Perhaps foremost limitations among these are the state laws of incorporation and the charter. These contain certain very definite and mandatory limitations upon various parts of net worth, and frequently upon the whole. Of lesser importance, but still of major significance are those provisions contained in the by-laws. These, too, are certain to provide for some net worth limitations on the use and disposition of assets. Most obvious and common among such restrictions are those as to minimum stated capital, earnings, surplus, dividends, and the like.

Even the various surplus categories express in various degrees limitations upon assets and their disposal. These may range all the way from surplus reserves such as those for contingencies, building expansion reserves, capital surplus, and the like, to the borderline classes which approach valuation reserves. They may indicate certain allocations of assets, certain non-acceptable assets, assets not financially available for distribution and the like. Even the presumably free surplus may not represent free assets. In the banks and coöperative credit associations it is frequently provided that certain accretions must be made to surplus to assure safe operations.

Along with the rest of the financial statement constituents, net worth has undergone a constant evolution concomitant with business activities and business units. For example, there has been a growth of what is known as "trading on the equity," whereby money is borrowed, and the net worth acts as a lever for gains or losses on this borrowed money. An hierarchy of capital contributors has been created by business practice even though such a functional change has not been adequately or fully realized and accepted by the law and courts. In this hierarchy the net worth merely constitutes parts of the whole. It merely represents the lower ranks in the various capital participants. Net worth has changed in essence from owner to partner, with various limited partners and creditors preceding it.

The development of great corporations, which partially finance their expansion out of retained earnings, has contributed to vast accumulations of assets not distinguishable from other assets but measured by "surplus." This has gone so far as to make surplus a much more important portion of net worth as well as the entire corporate assets, than has generally been the case heretofore.

Equally great changes have taken place in the nature and kinds of business assets. Greater diversification of assets, more specialization of functions, greater disparity between use values and book values, between book values and market values, and the like have tended to make impossible a simple statement of the asset values unless accompanied by definite and numerous assumptions underlying these values. Furthermore, the assumption of continuous current obligations, in addition to frequent long term claims against the assets, has further complicated the nature of the net worth. They have complicated its nature, not only in the difficulty to adequately appraise its status and relative rank in the claims on assets, but they have immensely confused the value which is inherent in the net worth itself. Even after definite values have been placed upon the various assets, and even after the prior claims have been definitely ascertained, one is not necessarily in a position to state carefully and accurately the value and true intrinsic worth represented by net worth.

The net worth, particularly those portions pertaining to the surplus accounts, is more or less interdependent with every financial policy and accounting principle which has entered into the determination of each account on the balance sheet as well as profit and loss statement. For example, one may first take the influences which enter upon the net worth as a "sum," but which are seldom linked directly with the net worth. The choice of a depreciation policy is one of the clearest instances. If policy is "liberal," then depreciation is likely to be charged into operations at relatively ample sums, and asset values of fixed properties, will be accordingly "conservatively" stated. Or the opposite picture may arise from the choice of another policy. Necessarily, this means that part of net worth, ordinarily surplus, is correspondingly larger or smaller than it might have been otherwise.

It is not necessary to choose a liberal or conservative depreciation policy in order to influence net worth and its value. One business may choose the straight line method of depreciation for its plan of valuation whereas another perhaps of similar nature, may logically choose a reducing balance plan. Between these two choices there may be no necessary consideration of conservatism or lack thereof. There will, however, be important variations in asset values, in surplus values, in the plans for financing replacements, and the true situation of net worth at any given time.

What has been said about depreciation applies to all other property values, and likewise net worth. The rate of property value expiration, its measurement, its recordation in accounts, and finally its reflection in statements, is a difficult and questionable matter. Vast differences may arise in the choice of rates, in the measure of values used and lost, and in the principles underlying such changes. These variations are ultimately reflected in net worth.

Even the whole problem of property appraisals, employment of market values for non-current assets, and such more or less arbitrary changes in values cannot be dismissed with cries of unconservatism, misrepresentation, inability to account therefor, or the like. Accounting long since gave up its strictly orthodox principle of valuation, namely cost. Market values, cost values, combinations of these two kinds of values, as well as others have been condoned and justified at various times. For the most part, these drifts away from the strict cost principle have been confined to current assets. But the idea is now fully germane in the financial statements. Consequently, accountants cannot entirely blame those who seek to introduce such values into other categories of assets. Correctly speaking, the distinctions between certain fixed assets and

certain current assets are often shady and difficult of ascertainment.

Each of these bases of valuation, whether of current assets, whether of fixed assets, whether at cost, whether at market, or at some other value, finally finds its way into the net worth. And since even present day orthodox statements invariably contain within them several of these bases, it is readily seen that even under the most favorable conditions, net worth is heterogeneous.

In addition to the broad class of problems such as those just suggested which enter into the determination of the true sum and meaning of net worth, there is another class, which is almost equally difficult in correct diagnosis in so far as it bears on net worth. This class is the numerous "reserves." These range all the way from undisputed "real" reserves to unquestioned liabilities. In between these two extremes there is much opportunity as well as frequent necessity for introduction of certain accounts which are rather indefinite in their meaning as well as in their final import both to asset values and to net worth, or even liabilities.

These may take the nature of inventory reserves—reserves for contingencies which may or may not occur. For example, it may be certain that there will be substantial declines in inventory value during a given period, which makes it expedient to reflect such change, or take cognizance thereof in the financial statements. A reserve may be set aside for such anticipated value shrinkage. At the time of the creation of such reserve, it may be looked upon as a true reserve, provided that the events have not occurred. But to what extent, if any, is one justified in saying that such reserve is part of net worth, when one is reasonably certain that part or all of the reserve will be called on for losses anticipated, but not certain in sum or time? In fact, such reserve is a warning, a sum created for an indefinite value. There is no simple way of ascertaining whether it belongs in net worth, or otherwise. And in a similar manner, there are many kinds of other reserves (aside from the usual reserves for depreciation, bad debts, and the like). These provide for weak or indeterminate values in assets and occasionally liabilities. They make allowance for the inaccuracies in principles and facts of valuation. Naturally they are reflected in net worth. In a broad sense, they, as well as the net worth itself, are valuation reserves.

There are other broad classes of items entering into net worth which confuse and cloud its real meaning or clear understanding. Perhaps one of the least justifiable is the manipulation of asset values, and the adjustment of their counterpart in net worth. These may readily destroy the meaning of net worth. Then there are large classes of items, which are not of such an unscrupulous nature, but in which the results are often highly open to question. For instance, there are not infrequent and insignificant capital transfers from surplus or certain classes of surplus, either earned or otherwise, to stock. And contrariwise, there may be transfers of stock values to surplus. Closely allied to these are the no par stocks with the great powers usually vested in directors as to what shall constitute "surplus" and what portion of the consideration shall constitute "capital." These items mentioned in this paragraph are of many shades and various graduations in the extent to which they contribute to the confusion, inaccuracy, and meaning of net worth.

When such practices are operative, as they are all too frequently, one may find it well nigh impossible to understand the meaning of net worth even within broad limits. When such opportunities for unclear meaning of net worth are considered in conjunction with the major changes in the size of net worth, particularly common stock equities, and the changes in stockholder responsibility with its concomitant creditor protection,[2] it is amazing to realize how unsatisfactory net worth may be in present-day financial statements. The long term trend of common stockholder investments has been toward smaller relative investments in business enterprises. At the same

[2] Winakor, Arthur H., "Creditors' Protection and Stockholders' Responsibility," The Accounting Review, Vol. IX, No. 3, pp. 247 to 253.

time, there has been a gradual evolution in the reduction of stockholder responsibility. Consequently, there has been a constant reduction of the margin for creditor protection. These changes coupled with the increasingly confused and unstable nature of net worth values, further contribute to destruction of the creditor's protective cushion.

Such variant methods of determining or adjusting and stating net worth raise questions as to what are the bases for valuing net worth. Perhaps it may be well to state frankly that there are no generally recognized principles of valuation for net worth items in the same sense as applies to assets, and even to liabilities. There are no general bases for valuation of net worth because net worth, especially common stock equity, and more particularly, surplus accounts are looked upon as residuals, balances, or compensating accounts.

There are, nevertheless, very definite principles of valuation of net worth, but these are usually obscured. As already stated, every principle of valuation applied to assets or debts is reflected directly or indirectly, sooner or later, in net worth. Accountants all too frequently fail consciously to realize that they are valuing net worth when they value assets and liabilities. They fail to realize fully that stockholders or the net worth equities have a real interest and right to assets. Stockholders' rights in assets and their correct statement are just as legitimate as those of creditors. Furthermore, stockholders suffer from the incorrect statement of asset or debt as well as the usual corresponding incorrect statement of their equity.

Let us return now to a statement made in the first pages of this article. It was stated that the balance sheet equation was subject to serious limitations. What is the significance of such thoughts as have just been expressed in their implication to this equation? There can be no doubt that once the values which enter into the balance sheet have been established, and set down therein, that one can readily state the results of this equation, and having certain known elements, can readily derive the unknowns by usual processes of algebra.

The mathematical formula is acceptable if it is looked upon as the expression of an ideal. It might still be considered as an acceptable expression for small business enterprises which have no serious problems of valuation of assets. It may also have been satisfactory for many simpler forms of enterprise and conditions of past generations in which the modern complexities of business operations, price, value, and such factors were of less prominence. In these times a "value" might reasonably have approximated a fact or a mathematically correct sum.

It is no longer applicable to business of the modern day, except as an ideal, and in a loose sense. By way of illustration of this point, thought may be directed to the growing recognition that accounting should present the several facts, or the several values, instead of giving one value, which is thereby assumed to be the fact.[3] Complexity of modern business units coupled with the rapidity of dynamic changes make it impossible to place mathematically correct values on all financial accounts, *except under certain definite preconceived assumptions or conditions*. What these assumptions or conditions should be is not always a common ground for meeting of minds, either of accountants or of businessmen.

One may safely state that there are always certain elements entering into the financial statements, and largely into the net worth, which cannot be known with mathematical accuracy. If such a situation is conceded, then it follows that the mathematical equation for expression of balance sheet data is of doubtful value. It is obvious that one cannot solve an equation of Assets − Liabilities = Net Worth when one of the unknowns is known to be a variable factor, with the degree of variation not ascertainable.

The foregoing thoughts contain within them a rather serious indictment of the meaning and value of net worth in financial statements. Needless to say, they do not all

[3] Canning, J. B., *Economics of Accounting*, Ch. XI.

apply to each and every statement. Enough of them apply to a sufficient number of the every day corporation financial statements, however, to give considerable credence to such reflections. There are many other criticisms, in addition to those listed, and suggested, which may readily be brought to mind. Regardless of whether or not one is willing to accept such suggestions in their full implications, there is still little doubt that there is ample need and room for a clearer understanding and presentation of net worth.

Perhaps a somewhat different view of the nature of net worth, especially of the common stock equity would aid in its better understanding. It should be viewed less as an owner of capital, and less as a supplier of capital, and more as a valuation of claims and limitations upon assets. We are too prone to look upon net worth as something in itself, whereas it merely expresses claims and limitations upon the assets. In this respect it differs little if any from any other equity.

It is well to recall the other classes of equities, which rank prior to net worth. As pointed out, these, too, restrict and limit the assets, but many of their provisions are operative through net worth or at least influence it. Even though the restrictive provisions of senior equities do not influence net worth directly, the fact that they limit and condition the assets and their disposition also means that they condition net worth, because net worth is junior in its rank to assets.

A few inferences may be drawn from the preceding paragraphs. First a few summary statements are presented. All the equities on the balance sheets are participants in the assets. They represent various gradations of limitations as well as of participants in the assets and their earnings. In addition, the limitations of the senior equities upon the assets are generally operative or influence the net worth. Then too, the problems of asset valuation with their attendant difficulties, as well as inconsistencies, all result in a heterogeneous "value" for net worth. Added to these inconsistent and confusing values, which condition the sum and meaning of net worth, are the serious problems within the net worth itself. These embrace the nature of reserves, the surplus to capital and capital to surplus transfers, and the like.

The sum total of all these restrictions of prior equities, confusion of asset values, and net worth transfers, result in a net worth, the exact nature of which is indeterminate.

A prime reason why a fair grasp of the real value and meaning of financial statements is difficult or impossible is the almost complete failure of them to disclose the bases of valuations as well as the relationships of the equities and their limitations and restrictions on the assets. Only a few of the more obvious of these may be read directly from the ordinary statement. How far a statement should go in disclosing these bases and limitations is a difficult thing to say. Certainly they should go much further than they do. Statements and their intrinsic value would be much strengthened by such disclosures. Answers to some of these might be found by investors if they studied the laws, asked for copies of by-laws, analyzed security contracts, and the like. But many of them can be found only in the company files and policies. These should be disclosed.

ADEQUATE RECORDS AS AN ELEMENT IN BUSINESS SURVIVAL*

EMMA CORSTVET

THE SUBSTANCE of this article is presented as a test of the hypothesis that inadequate bookkeeping is causally related to business failure. Lest the word "causal" result in the raising of eyebrows, the author hastens to explain that this word is used merely in the sense of an investigation into whether there exists a concomitant variation between adequacy of records and survival or non-survival in business.

No study of business failures within the past five years has been complete without statistics on the proportion of bankrupt firms keeping adequate records of account and no lists of causes of bankruptcy has been complete without "inadequate records" as one.[1] This is partly because it seems somehow meaningful, in a field so chaotic and so theoretically undeveloped, to present all factors that come to mind and are countable. It is partly too, because the bankruptcy act sheds a legal significance upon the subject by asserting that the judge shall grant a discharge unless the bankrupt has failed to keep books of account, or records, from which his financial conditions and business transactions might be ascertained; unless the Court deems such failure or act to have been justified under all the circumstances of the case,[2] an assertion which at present carries with it little more than formal legal consequences.[3] And above all, it is because there remains the assumption that somehow, adequate accounting is an element of efficient business enterprise and one mark between the enterpriser who wrings a producer's surplus from his labors and him who emerges from the submarginal group only into the bankruptcy court. In other words, that here lies a division between him who fails and him who succeeds.

But figures on the adequacy of records kept by bankrupts are of no value whatever unless they can be compared with enterprisers who do not enter the bankruptcy courts; however low the percent of adequacy, it may be no lower than that of average business judged by the same standards.

Having made a survey of the records of every tenth business enterprise in a New England city, and finding that only 57% of these businesses, all, at least at the time of the survey, out of known financial difficulties, kept adequate records, it is proposed to compare them, using the same accountant and the same methods, with a group of New England business failures.[4]

* This is the second and final article on accounting records which forms a part of the investigations into various aspects of bankruptcy undertaken by the Institute of Human Relations of Yale University under Professor W. O. Douglas of the Yale Law School. Article I was published in the ACCOUNTING REVIEW, September 1935.

[1] For example: "Some Functional Aspects of Bankruptcy," W. O. Douglas, *Yale Law Journal* (1932); "Business and Personal Failure and Adjustment in Chicago," John H. Cover, *University of Chicago Press* (1933); "Causes of Commercial Bankruptcies," U. S. Dep't. Commerce, *Domestic Commerce Series* (1932).

[2] National Bankruptcy Act, Section 14 (b).

[3] See Appendix, *Adequacy of Accounting Records in a Money Economy*, the ACCOUNTING REVIEW, September, 1935. An examination of cases disclosed only one in which there was not definite evidence presented of some type of fraud on creditors. For example, in re *Rothman* (DCSD cel. CD, Nov., 1930), a women's wear merchant was refused a discharge on the grounds that he failed to keep books of account from which his financial condition could be ascertained. A false statement of assets to obtain credit was also upheld. In *Nix v. Sternberg* (38 Fed. (2) 611, 1930) a real estate dealer was refused a discharge on the grounds of inadequate records. Three pages had been torn out of an account book and it was also claimed that he had transferred assets within four months of filing a bankruptcy claim. In re *Librovitz*, 53 Fed. (2nd) 132, a discharge was refused a small business man who kept his own books which "seemed neat and accurate," though an accountant asserted they were not records from which his financial condition and transactions could be obtained. There was present also an unexplained deficiency in assets and large gambling debts. In re *Russell*, 52 Fed. (2nd) 749 (1931), a lumber merchant and manufacturer, though keeping only a small memorandum book was not refused a discharge. The court quoted in its opinion, "Crude or careless method of keeping books, unaccompanied by any intent to conceal bankrupt's true financial condition is not sufficient grounds for denial of a discharge."

[4] The terms "Bankrupts" and "Failed businesses" are used interchangeably throughout this article to refer

Fifty-seven percent is not a startlingly high ratio of adequacy. If this is representative of normal non-bankrupt business, then to disclose any relationship between business failure and inadequate books, the total ratio of failed businesses must be lower. It must remain lower when some of the possibly effecting variables such as types of business, with their varying credit and cost analysis needs and sizes of business with their differing complexities on the one hand and their differing provision for professional services on the other, are taken into account. The main purpose of this article is to provide some of these elements of analysis.

A collateral value in the material presented is its disclosure of the types of records predominant in the variety of enterprises represented. The type of record is, of course, one index of adequacy. It would, for example, be impossible for transactions in a wholesale business to be represented without the inclusion of records on accounts receivable and no system of single entry would enable a manufacturer of fair size, especially if incorporated, to state the proprietorship equation. Consequently, the inclusion of information on types of records employed is essential for the thoughtful reader who wishes to evaluate for himself the estimates made on adequacy.

Further, while this paper is not addressed to the legal aspects of the problems of business failure or of control of business, it is, as in many aspects of economics, impossible to divorce it from law entirely. For this the usual or customary is important. In the absence of any other than a common-law standard of adequacy, should the movement to increase the severity of the application of the bankruptcy discharge section of the bankruptcy act having to do with adequate records get under way, judicial requirements would almost certainly depend on the standard of ordinary care, which, in turn, is generally, if not always, dependent on customary standards. The application of customary standards needs some information on what these customary standards are, information which, judged from the legal literature is singularly out of the reach of our judiciary. This, from the standpoint of legal liability.

From the standpoint of efficient operation of our enterprises, however, the words "adequate" and "usual" may be far from identical. The student of economic frictions, as well as the legal preventive theorist may well find the description, limited though it is qualitatively, of the extent to which records of certain types are usual, of greater interest than the necessarily subjective determination of adequacy.

BANKRUPTS AND NON-BANKRUPTS

Between June, 1930, and June, 1931, Professor Douglas, together with the Department of Commerce, made detailed studies of all bankrupts who applied for a discharge in Boston.[1] Questions on accounting records were among many that appeared in the questionnaire with which bankrupts were interviewed. On the basis of these questions it was found that 30.3% of the businesses kept accounting records regarded as adequate for their particular business needs. As there was no material available for comparison to determine whether such a figure was unusual in business, a study was made of the accounting records of firms in another New England City. For this, the classified city directory was used and each tenth firm was selected after alphabetical arrangement had been made. The directory was published in August of 1931, the sample comprised firms that were in business at that time and these were visited between the end of December, 1931, and the end of March, 1932. The small number that had already gone out of business, even those who had failed, were visited also and included, on the assumption that what was wanted was not successful firms alone, but a sample of the average business

to the same group. Neither term is precisely accurate. We have no satisfactory figures on failed businesses. Such statistics as are available, for example in Dun's Review, refer only to those who have made an adjustment with creditors through an outside agency and where there has been a loss to creditors. The group referred to in this study are of applicants for bankruptcy discharge. For details of this group see: Douglas, "Some Functional Aspects of Bankruptcy," *Yale Law Journal* (1932).

at a given time. These were, then, all "going concerns" at the time the sample was selected.[5]

For each business a schedule was filled in by the investigator and, since only one element was considered—the kind of records kept—information was, naturally, considerably more detailed than that for the failed business. In order to gauge the size of the businesses, gross income was taken for the year 1930, whether the fiscal year extended between January, 1930, and December 31, 1930, or July, 1930, and July, 1931. Information on gross income of the bankrupts generally, though not always, included the same year.

Businesses, in both cases, were divided for convenience into manufacturer, wholesaler, contractor and retailer. The 509 Boston Bankrupts and the 452 going firms were found to fall into these classes as shown in Table 1.

TABLE 1

	Bankrupts		Going concerns	
	Number	Per cent	Number	Per cent
Manufacturers	52	10.2	49	10.8
Wholesalers	54	10.4	41	9.1
Contractors	156	30.7	88	19.5
Retailers	248	48.7	274	60.6
	509	100.0	452	100.0

Thus, manufacturers and wholesalers were in about the same proportion for both groups while there were more contractors and fewer retailers among the bankrupts than in the sample of going concerns.

TEST OF ADEQUACY OF ACCOUNTING RECORDS

The basis upon which the adequacy of accounting records was judged has been described in the previous and more detailed description of the going concerns.[6] It seems necessary, however, to make a brief summary here. There exist no set standards for the records of any given business since the requirements of each firm vary with the size of business covered, the type of goods handled and the nature of credit extension. It was necessary to have an accountant go over each case, bankrupt and non-bankrupt and, considering the nature of each business, base his decision accordingly. Roughly, he considered adequate records to be:

"Those from which, with reasonable effort, an owner is enabled to get his total of income and expenditure and determine, with reasonable accuracy, his business loss and gain." He considered that the records should give a fairly accurate knowledge of the amount and source of his cash receipts, the amount and source of his cash disbursements, an analysis of the income and major expenses of his business, an estimate of his financial condition at a given time, an evaluation of his inventory, unless his business was such as required no inventory, and of his assets and liabilities. In addition, permanency of records, a reasonable accuracy and ease in the compilation of data and availability of material once recorded were considered.

According to his point of view, the small storekeeper who did a cash business and paid his bills in cash, whose overhead was more or less fixed, might fulfill the requirements if he kept track of his receipts and the small contractor might pass the test if he kept memoranda of his time and materials. With larger businesses and those complicated by labor bills and by credit business, requirements naturally were higher. In the detailed description of records of going concerns an attempt was made to specify the requirements by examples of adequate and inadequate records in average businesses of the different types.

GENERAL COMPARISONS

Thirty per cent of the bankrupt businesses and fifty-seven per cent of the going concerns kept records adequate for the purpose of showing "*with reasonable accuracy, business loss or gain.*" These gross figures may, of course, be subject to internal differences which effect the utility of the comparison. The information obtained from going businesses was more detailed and books were more frequently examined. This

[5] For fuller description of sample see: Corstvet, "Adequacy of Accounting Records in a Money Economy," the ACCOUNTING REVIEW, September, 1935.

[6] *Ibid.* The appendix.

might have led to a more severe knowledge of existing defects in the accounting systems. On the other hand, the possible desire of a bankrupt petitioner to present his case most favorably may have led either to his exaggerating their completeness or, where he thought his accounts might reveal dangerous facts, to denying their existence. It is impossible to estimate the probable resulting errors or their effect on the comparison. Certain other possible differences, such as that one group might contain larger businesses or business of a type where good records are more usual, can be accounted for, and throughout this comparison the attempt is made to do so.

Within the various types of business, a comparison of adequacy of records yields the information appearing in Table 2.

TABLE 2
PER CENT OF GROUP KEEPING ADEQUATE RECORDS

	Failed Businesses		Going Businesses	
	Per cent	Number	Per cent	Number
Manufacturers	53.8	28	84.4	38
Wholesalers	49.1	26	80.0	28
Contractors	23.1	36	69.6	55
Retailers	25.8	64	45.7	117
Total	30.3	154	57.3	238

The persistence of this difference within the various types of business is extremely interesting. In all types but retail the going firm showed at least 30% greater adequacy, in retail it was 20%.

A division of all firms according to value of business shows the difference persisting until the $200,000 yearly sales group is reached. Further, it leads to one of the most important outcomes of the study, the suggestion that the concomitant variation of adequate books and business survival does appear to exist, but only up to a certain level of size; that inadequate books may be "causally" related to bankruptcy among the great majority which comprise the firms smaller in point of size; that there is no evidence of such relationship among the larger businesses.

The subdivisions of businesses according to size of income points to the conclusion that within both bankrupt and non-bankrupt businesses, the small firm is less apt than the large one to keep records adequate even for its lesser needs.[6] This may be somewhat due to greater illiteracy or lesser managerial ability engaged in small enterprise or to the fact that the small entrepeneur must also be an active buyer and seller and, unable to afford a bookkeeper, must snatch haphazard moments for infrequent recording. There are in existence very simple systems of bookkeeping which claim to require no more than fifteen minutes a day but they do not appear to be frequently used. Whatever the reason, the tendency of adequacy to differ with size of firm makes a comparison according to size business necessary. Yearly gross income was taken as indicative of the size.

One half of the bankrupts, 49.5%, and 53% of the going concerns had a gross income of less than $10,000 a year. On the other hand, the average (median) gross income of bankrupt businesses was $10–20,000 a year and the median going concern was between $5–10,000. 5.6% of the bankrupts took in $100,000 or more a year and 12.4% of the non-bankrupts. It can be seen from this that the bankrupt group contained fewer small and fewer large businesses than the sample of going concerns. It is generally assumed that, since a liability of $1,000 is a condition for petition in bankruptcy, many small businesses simply close down and creditors realize the hopelessness of pursuing them for debts, while very large firms often find in mergers or trusteeships a way out of insolvency in preference to the bankruptcy court.

In order to find a more precise comparison of the accuracy of accounting records of bankrupts and non-bankrupts, firms were divided according to gross yearly income.

The low point of adequacy is reached with both groups among businesses of $1,000 to $5,000 gross income and after that, in both cases there is a continuous rise. But where, as in the table above, size of business is held constant, the going concern, until the $200,000 income is reached, remains higher

TABLE 3
ADEQUACY OF ACCOUNTING RECORDS
(According to size of Business)

Yearly Gross Sales	Failed Businesses						Going Businesses					
	Adequate		Inadequate		Unknown		Adequate		Inadequate		Unknown	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0– 1,000	11	33.2	20	60.6	2	6.1	19	70.4	8	29.6	0	0
1– 5,000	14	13.7	86	84.3	2	2.0	38	31.7	80	66.7	2	1.7
5– 10,000	17	18.3	73	78.5	3	3.2	32	46.4	35	50.7	2	2.9
10– 20,000	25	28.7	60	68.9	2	2.3	24	53.3	20	44.4	1	2.2
20– 30,000	20	41.7	27	56.3	1	2.1	20	64.5	11	35.5	0	0
30– 40,000	9	40.9	13	59.1	0	0	18	81.8	4	18.2	0	0
40– 50,000	8	38.1	11	52.4	2	9.5	12	85.7	2	14.3	0	0
50– 75,000	13	65.0	5	25.0	2	10.0	19	82.6	4	17.4	0	0
75–100,000	9	75.0	3	25.0	0	0	7	100.0	0	0	0	0
100–150,000	7	77.8	2	22.2	0	0	14	93.3	1	6.7	0	0
150–200,000	7	87.5	1	12.5	0	0	6	100.0	0	0	0	0
200 and over	9	100.0	0	0	0	0	29	96.7	1	3.3	0	0
Unknown	5	11.1	33	73.3	7	15.6	0	0	0	0	6	100.0
Total	154	30.3	334	65.6	21	4.1	238	57.3	166	40.0	11	2.7

TABLE 4
TYPES OF RECORDS KEPT[7]

Yearly Sales Dollars	Failed Businesses								Going Businesses							
	No Records		Unsystematized Records		Single Entry		Double Entry		No Records		Unsystematized Records		Single Entry		Double Entry	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0– 1,000	17	51.51	6	18.18	8	24.24	0	0	22	80.5	3	11.1	2	7.4	0	0
1– 5,000	52	50.98	24	23.52	18	17.64	4	3.92	54	45.0	32	26.7	27	22.5	4	3.3
5– 10,000	40	43.01	28	30.10	10	10.75	11	11.82	9	13.0	27	39.1	25	36.2	7	10.1
10– 20,000	26	29.88	26	29.88	14	16.09	16	18.39	5	11.1	12	26.7	21	46.7	7	15.6
20– 30,000	9	18.75	9	18.75	11	22.91	18	37.50	1	3.2	4	12.9	14	45.2	12	38.7
30– 40,000	2	9.09	1	4.54	8	36.36	9	40.90	1	4.5	1	4.5	13	59.1	7	31.8
40– 50,000	4	19.04	3	14.28	4	19.04	7	33.31	0	0	0	0	7	50.0	7	50.0
50– 75,000	2	10.00	1	5.00	2	10.00	13	65.00	0	0	1	4.3	8	34.8	14	60.9
75–100,000	0	0	0	0	1	8.33	11	91.66	0	0	0	0	1	14.3	6	85.7
100–150,000	0	0	0	0	1	11.11	8	88.88	0	0	0	0	2	13.3	13	86.7
150–200,000	0	0	0	0	1	12.50	7	87.50	0	0	0	0	0	0	6	100.0
200 and over	0	0	0	0	0	0	9	100.0	0	0	0	0	1	?	29	0
Unknown	17	37.77	2	4.4	1	2.2	1	2.22	0	22	0	0	0	0	1	16.7
Totals	169	33.2	100	19.64	79	15.52	114	22.39	92	22	80	19.3	121	29.2	113	27.2

in adequacy of books than the bankrupt business.

The great difference in adequacy of bankrupts and non-bankrupts in the very smallest group, with gross income of less than $1,000 a year is, however, modified by the

[7] Businesses, the type of whose records were unknown are not included in this table. The number of such unknowns in each category of business size was as follows for failed businesses: $0–1000, 2; $1–5000, 4; $5–10,000, 4; $10–20,000, 5; $20–30,000, 1; $30–50,000, 5; $50,000 and over, 2; size of business unknown, 24. Total 47. The number of going businesses was as follows: $0–1000, 0, $1–5000, 3; $5–10,000, 1; $10,000 and over, 0; size of business unknown, 5; Total 9. All percentages given in table 4 are based on totals which include these unknowns. In all other tables given throughout the article the number of unknowns is given but their percentages are sometimes omitted for lack of space. All percentages, however, are based on totals which include these unknowns and the per cent of unknowns can easily be obtained by subtracting total per cent of the group from 100.

difference in types of business contained within this category. There were thirty-three of these among bankrupts and twenty-seven among non-bankrupts. The bankrupts were predominently contractors under difficulties in the building trade slump, while the going concerns were primarily retailers. The use of a cash register by a hole-in-the-wall cigarette shop, kept by the owner's wife, might class the recording as adequate, going businesses were rated as adequate; and of all firms which had no books, 2% of the failed and 26% of the going businesses were declared adequate.

TYPES OF RECORDS KEPT

Both in its relation to adequacy and as an indication of customary practice, the types of records kept were regarded as an important part of the inquiry.

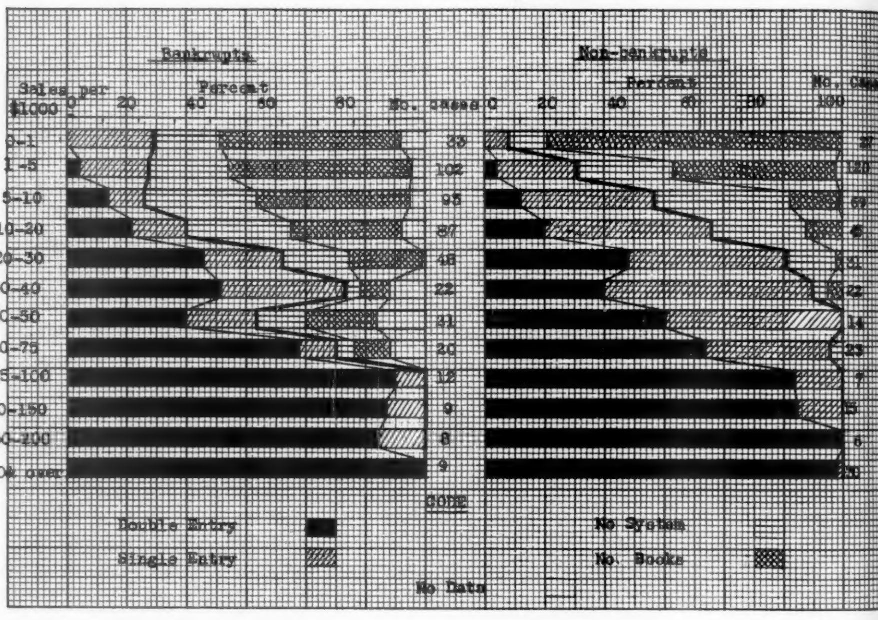

CHART 1: TYPES OF ACCOUNTING RECORDS KEPT

while a contractor, temporarily reduced by the depression, might be regarded as inadequate if he kept no books or a scratch pad. When an analysis was made of the extent to which the accountant had identified types of records and adequacy, it was found that: of all firms using double entry records; 87% of the failed and 98% of the going business had been rated as adequate; of all firms using single entry records, 56% of the failed and 80% of the going businesses were called adequate; of all firms using unsystematized records, 3% of the failed and 10% of the

One-third of the bankrupts and one-fifth of the going concerns kept no books at all, while 39% of the bankrupts and 56% of the non-bankrupts had systems either of single or double entry. The types of records kept are shown by Chart I and Table 4.

The chart shows clearly that the major differences lie (1) in the more extensive use of single entry records by the going concerns and (2) in the extent to which bankrupts, even of large size, kept no books. Even with a yearly income of $20–30,000 we find 19% of the bankrupts without books and

only 3% of the non-bankrupts, while at $40–50,000 income, 14% of the bankrupts still have no books and none of the non-bankrupts do without them.

The use of unsystematized records is most frequent with both groups at the $5–10,000 income level, but beyond that remains more frequent with bankrupts than non-bankrupts. With this size business 11% of the bankrupts use single entry systems and 36% of the non-bankrupts. After this point single entry systems prove in total far less frequent with bankrupts than with going concerns.

Double entry systems, on the other hand, are used about equally until the $30–40,000 income group is reached. At this point it is more frequent with bankrupts than going concerns (single entry being less in use) and after this the use is about equal. All businesses but one going concern used double entry system after $200,000 yearly gross income had been reached.

INVENTORIES

Inventories, at least yearly, were taken by about one-third of the failed and one-half of the going concerns. The following table shows differences according to the types of business:

TABLE 5

INVENTORY TAKEN AT LEAST YEARLY (PER CENT)

	Bankrupts			Going Concerns		
	Yes	No	Unknown	Yes	No	Unknown
Manufacturers	51.9	36.5	11.5	71.1	24.4	4.4
Wholesalers...	52.8	32.1	15.9	77.1	22.9	0
Contractors...	16.1	44.9	39.1	32.9	57.0	10.1
Retailers.....	33.9	54.4	11.7	44.5	53.5	2.0
Total......	32.2	47.3	20.4	48.0	48.4	3.6

Within these types of business it is seen that indifference in inventory taking varied a good deal from wholesalers, where 25% less of the bankrupts took inventory than the going concerns, to retailers where bankrupts came within 14% of those not bankrupt. The large number of unknowns in the failed group makes comparison here of doubtful value, however. In the face of so many unknowns it may be stated, for what it is worth, that when bankrupt firms reached a gross income of $30–40,000 a year and not before did inventory taking occur at least half of the time, after which the per cent taking it declined again and not until $75,000 sales were reached was inventory taking consistently more than 50%. With the non-bankrupts all firms of $10,000 income or more took inventory at least half of the time. To summarize, a total absence of books was considerably more frequent with failed businesses than going firms, systematized records were less frequent although, when kept, the double entry system was as frequent as with "going concerns," the single entry system less frequent. Inventory taking, also, was less frequent with bankrupts, whatever the type of business, than with non-bankrupts.

Thus far, comparisons between failed and going enterprises have tended to include all types of business. But it was pointed out in the detailed study of going concerns that the needs of the several types of business varied greatly and that there may be much danger in the use of total figures, especially since the proportions of types of business among failed and going enterprises are not altogether alike. The second part of this article will be devoted to describing differences between failed businesses and going concerns within the groups of manufacturers, wholesalers, contractors and retailers.

Manufacturers: The average (median) manufacturer who petitioned in bankruptcy was smaller than the average for the going concerns, having a $10–20,000 gross income as compared with $20–30,000 for the latter. Bookkeeping requirements for a manufacturer, even though he be not large, are apt to be more stringent than for other types of business. He has the problems of credit buying and long-time credit selling, he must reckon machinery and labor and return on capital, his is the only type of business where cost accounting was found to be common. It is noteworthy that double entry systems of bookkeeping appeared with greater proportionate frequency among bankrupt and non-bankrupt manufacturers than in any other types of business.

TABLE 6

ADEQUACY OF ACCOUNTING RECORDS—MANUFACTURERS

Gross Income Dollars	Failed Businesses							Going Concerns						
	Adequate		Inadequate		Unknown		Total	Adequate		Inadequate		Unknown		Total
	No.	%	No.	%	No.	%		No.	%	No.	%	No.	%	
0– 1,000	1	50.0	1	50.0	0	0	2	2	66.6	1	33.3	0	0	3
1– 5,000	1	12.5	6	67.5	1	12.5	8	6	75.0	2	25.0	0	0	8
5–10,000	2	50.0	2	50.0	0	0	4	3	60.0	2	40.0	0	0	5
10–20,000	9	64.3	4	28.6	1	7.1	14	4	80.0	1	20.0	0	0	5
20–30,000	3	75.0	1	25.0	0	0	4	1	100.0	0	0	0	0	1
30–50,000	2	28.6	5	71.4	0	0	7	3	100.0	0	0	0	0	3
50,000 and over	10	90.9	1	9.1	0	0	11	19	100.0	0	0	0	0	19
Unknown	0	0	1	50.0	1	50.0	2	0	0	0	0	1	100.0	1
Totals	28	53.8	21	40.4	3	5.8	52	38	84.4	6	13.3	1	0	45

Fifty-four per cent of the failed manufacturers came up to the minimum of adequacy and eight-four per cent of the solvent manufacturers.[8] The bankrupts did, indeed, increase in adequacy as the businesses grew larger, but irregularly. Thus, while half were adequate in the groups of less than $1,000 gross income and of $5–10,000 gross income, only a quarter of those between $30–40,000 were adequate and a third of those between $40–50,000. All except one of the manufacturers with gross income of $50,000 or over were found to keep adequate records. In the non-bankrupt manufacturer's group, on the other hand, there was no class that was not at least 60% adequate and after a gross income of $20,000 was reached, all were adequate. Table 6 presents these figures in greater detail.

A considerable difference existed in the types of record used by bankrupt and non-bankrupt manufacturers. Some sort of bookkeeping system, either single or double entry, was found in 62% of the bankrupt manufacturers and 79% of the going concerns. Twenty-one per cent of the bankrupts had no books and 9% of the non-bankrupts. In the latter group books existed for all firms of or exceeding $5,000 gross income, in the former "No books" was recorded until the $50,000 income group was reached, as can be seen from table 7.

TABLE 7

TYPES OF ACCOUNTING RECORDS—MANUFACTURERS

Gross Income Dollars	Failed Businesses									Going Concerns									
	No Books		Unsystematized		Single Entry		Double Entry		Unknown	No Books		Unsystematized		Single Entry		Double Entry		Unknown
	No.	%	No.	%	No.	%	No.	%	No.	No.	%	No.	%	No.	%	No.	%	No.
0– 1,000	2	100.0	0	0	0	0	0	0	0	2	66.6	1	33.3	0	0	0	0	0
1– 5,000	5	62.5	0	0	2	25.0	0	0	1	2	25.0	1	12.5	3	37.5	2	25.0	0
5–10,000	2	50.0	0	0	1	25.0	1	25.0	0	0	0	2	40.0	1	20.0	2	40.0	0
10–20,000	0	0	3	21.4	1	7.14	8	57.14	2	0	0	0	0	2	40.0	3	60.0	0
20–30,000	1	25.0	0	0	0	0	3	75.0	0	0	0	0	0	0	0	1	100.0	0
30–40,000	0	0	1	25.0	2	50.0	1	25.0	0	0	0	0	0	1	50.0	1	50.0	0
40–50,000	1	33.3	0	0	0	0	2	66.6	0	0	0	0	0	0	0	1	100.0	0
50,000 & over	0	0	0	0	1	9.1	10	90.9	0	0	0	0	0	0	0	19	100.0	0
Unknown	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1
Totals	11	21.15	4	7.09	7	13.46	25	48.07	5	4	8.9	4	8.9	7	15.5	29	64.4	1

Wholesalers. Possibly the widest diver-

[8] For standards of adequacy employed for each type of business and samples of books regarded as adequate, see opp. cit. note 5, appendix.

TABLE 8

ADEQUACY OF ACCOUNTING RECORDS—WHOLESALERS[9]

Gross Income Dollars	Failed Businesses							Going Businesses						
	Adequate		Inadequate		Unknown		Total	Adequate		Inadequate		Unknown		Total
	No.	%	No.	%	No.	%		No.	%	No.	%	No.	%	
0– 1,000	2	100.0	0	0	0	0	2	1	100.0	0	0	0	0	1
1– 5,000	1	12.5	7	87.5	0	0	8	2	66.6	1	33.3	0	0	3
5–10,000	2	40.0	2	40.0	1	20.0	5	2	100.0	0	0	0	0	2
10–20,000	1	14.3	6	85.7	0	0	7	3	60.0	2	40.0	0	0	5
20–30,000	1	25.0	3	75.0	0	0	4	3	75.0	1	25.0	0	0	4
30–40,000	3	75.0	1	25.0	0	0	4	1	50.0	1	50.0	0	0	2
40–50,000	3	60.0	1	20.0	1	20.0	5	1	100.0	0	0	0	0	1
50–75,000	1	50.0	1	50.0	0	0	2	3	100.0	0	0	0	0	3
75,000 and over	12	85.7	2	14.3	0	0	14	12	85.7	2	14.3	0	0	14
Unknown	0	0	1	50.0	1	50.0	2	0	0	0	0	0	0	0
Totals	26	49.1	24	45.3	3	5.6	53	28	80.0	7	20.0	0	0	35

gence of bookkeeping needs exists among wholesalers. In one case a man bought cattle in the country and sold to city butchers and, since he was not well and worked little, took in less than $1,000 a year. In another, a grocer's supply company sold teas, coffees, rice, etc., which it bought by the carload; in a third case the wholesaler did a business of $100,000 yearly selling paper and paper bags. The tendency of wholesale business is to be large, and it was pointed out in a previous study that the volume of business done by wholesalers in the sample of going concerns was greater even than that done by manufacturers, the average (median) business being $40–50,000 a year. The average bankrupt wholesaler was smaller, with a sales volume of $20–30,000 a year.

TABLE 9

TYPES OF ACCOUNTING RECORDS—WHOLESALERS

Gross Income Dollars	Failed Businesses									Going Businesses									
	None		Unsys-tematized		Single Entry		Double Entry		Un-known	None		Unsys-tematized		Single Entry		Double Entry		Un-known
	No.	%	No.	%	No.	%	No.	%	No.	No.	%	No.	%	No.	%	No.	%	No.
0– 1,000	0	0	0	0	2	100.0	0	0	0	1	100.0	0	0	0	0	0	0	0
1– 5,000	45	0.0	3	37.5	0	0	1	12.5	0	0	0	0	0	2	66.6	1	33.3	0
5– 10,000	0	0	1	20.0	1	20.0	2	40.0	1	0	0	0	0	1	50.0	1	50.0	0
10– 20,000	22	8.6	3	42.9	1	14.3	1	14.3	0	1	20.0	2	40.0	2	40.0	0	0	0
20– 30,000	0	0	1	25.0	1	25.0	2	50.0	0	1	25.0	0	0	0	0	3	75.0	0
30– 40,000	0	0	0	0	1	25.0	3	75.0	0	1	50.0	0	0	0	0	1	50.0	0
40– 50,000	0	0	0	0	2	40.0	2	40.0	1	0	0	0	0	0	0	1	100.0	0
50– 75,000	15	0.0	0	0	0	0	1	50.0	0	0	0	0	0	0	0	3	100.0	0
75–100,000	0	0	0	0	2	14.3	12	85.7	0	0	0	0	0	1	7.1	13	92.9	0
Unknown	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Totals	7	13.2	8	15.1	10	18.9	24	45.3	4	4	11.4	2	5.7	6	17.1	23	65.7	0

Forty-nine per cent of the failed wholesalers measured up to the employed test of adequacy and 80.0% of the going firms. Until the $30,000 income level was reached the failed wholesaler's books were more frequently inadequate than adequate, but, from this point onward, the proportionate adequacy remained high and, after $100,000 sales were reached, was invariably 100%. Non-bankrupt wholesalers, on the other hand, showed a far higher degree of adequacy

[9] Care should be taken to note numbers as well as percentages, especially in this group where classes comprise small numbers of cases.

for the lower sales groups and though no consistent trend upward is apparent, there was never less than 50% adequacy in any group, while after $40,000 sales were reached all but two wholesalers had records sufficient for their needs. The per cent of adequate records for failed and going businesses was exactly the same after the $75,000 income category was reached. Table 8 indicates these facts in detail.

The types of accounting records kept by wholesalers, both bankrupt and non-bankrupt, present a more irregular picture than going contractors, since, for bankrupts, only 23% had records sufficient for their needs, while the figure for going concerns was 69%.

There were, however, a larger number of large businesses among the sample taken for going contractors, average size (median) business was the same for both bankrupts and non-bankrupts but there were three times as many failed businesses with a gross yearly income of at least $50,000. The difference in adequacy is not accounted for by the difference in size, by any means, as can be seen in Table 10.

Table 10
Adequacy of Accounting Records—Contractors

Gross Yearly Income Dollars	Failed Businesses							Going Concerns						
	Adequate		Inadequate		Unknown		Total	Adequate		Inadequate		Unknown		Total
	No.	%	No.	%	No.	%		No.	%	No.	%	No.	%	
0– 1,000	8	36.4	12	54.5	2	9.1	22	8	88.9	1	11.1	0	0	9
1– 5,000	6	18.8	26	81.3	0	0	32	11	55.0	7	35.0	2	10.0	20
5–10,000	4	14.3	24	85.7	0	0	28	11	64.7	5	29.4	1	5.9	17
10–20,000	4	36.4	6	54.5	1	9.1	11	5	83.5	1	16.6	0	0	6
20–30,000	5	31.3	10	62.5	1	6.2	16	1	33.3	2	66.6	0	0	3
30–50,000	0	0	7	87.5	1	12.5	8	3	100.0	0	0	0	0	3
50–75,000	2	40.0	1	20.0	2	40.0	5	4	80.0	1	20.0	0	0	5
75,000 and over	4	66.7	2	33.3	0	0	6	12	100.0	0	0	0	0	12
Unknown	3	10.7	22	78.6	3	10.7	28	0	0	0	0	4	100.0	4
Totals	36	23.1	110	70.5	10	6.4	156	55	69.6	17	21.5	7	8.9	79

the records of other fields of enterprise. This is the least reliable of the sets of figures here presented, at least so far as the figures on going businesses are concerned, because the number is so small. Double entry systems were considerably more frequent with going businesses than with those who had failed. The latter tended to keep unsystematized records till a greater volume of business was reached and with both failed and going businesses single entry systems were infrequent. The figures appear in Table 9.

Inventory taking was about 25% more frequent among non-bankrupt than bankrupt wholesalers. Bankrupt wholesalers took inventory at least half of the time after $20,000 income volume was reached and non-bankrupts after $5,000 income volume.

Contractors: A large difference, 46%, exists in the adequacy of books of failed and going contractors, since, for bankrupts, only 23% had records sufficient for their needs, while the figure for going concerns was 69%.

Among bankrupt contractors, classified according to gross income, no group was as much as 50% adequate until the $200,000 yearly income class was reached, while non-bankrupt contractors came up to the test of adequacy at least 50% of the time in all groups but one, the $20–30,000 income class where, of the three firms in this class, two were inadequate.

The number of contractors who petitioned for discharge in bankruptcy, 156, was 31% of all businesses petitioning, while the number of non-bankrupt contractors in the sample of going concerns was 79 or 20% of all businesses of the community. One member of this trade expressed the opinion that the small amount of capacity required to set up as a contractor tempts every plumber, carpenter or electrician who cannot hold a job to set up for himself and that the amount of inefficiency in this type of business is con-

sequently high. It is more probable, however, that since building trades were extremely hard hit by the depression and construction came almost to a standstill in some communities, the contractor who had no reserves, either because he had not been long enough in business to acquire them or because he had not managed to accumulate, simply went under. Many of the going concerns assured the investigator that they were making no profits or were losing money. The depression, however, appeared to have had little affect on changing the type of records some classes contain few firms. Unsystematized records appear with almost equal frequency, but are more scattered among failed than going firms.

The material for comparison of inventory taking of bankrupt and non-bankrupt contractors is too incomplete to be useable, since in 39% of the bankrupts and 11% of the going firms the factor is unknown. If unknowns are excluded in both groups of contractors, 26% of the bankrupts took inventory and 34% of the non-bankrupts. The nature of the contracting business is often

Table 11

Types of Accounting Records—Contractors

Gross Income Dollars	Failed Businesses									Going Businesses								
	None		Unsystematized		Single Entry		Double Entry		Unknown	None		Unsystematized		Single Entry		Double Entry		Unknown
	No.	%	No.	%	No.	%	No.	%	No.	No.	%	No.	%	No.	%	No.	%	No.
0– 1,000	12	54.5	3	13.6	5	22.7	0	0	2	9	100.0	0	0	0	0	0	0	0
1– 5,000	18	56.3	6	18.8	6	18.8	1	3.1	1	5	25.0	5	25.0	8	40.0	0	0	2
5– 10,000	16	57.1	8	28.6	2	7.1	2	7.1	0	2	11.8	3	17.6	9	52.9	2	11.8	1
10– 20,000	4	36.4	1	9.1	1	9.1	3	27.3	2	0	0	2	33.3	3	50.0	1	16.7	0
20– 30,000	4	25.0	3	18.8	5	31.3	3	18.8	1	0	0	2	66.6	0	0	1	33.3	0
30– 40,000	2	100.0	0	0	0	0	0	0	0	0	0	0	0	2	100.0	0	0	0
40– 50,000	2	33.3	2	33.3	0	0	0	0	2	0	0	0	0	0	0	1	100.0	0
50– 75,000	0	0	1	20.0	0	0	2	40.0	2	0	0	0	0	2	40.0	3	60.0	0
75–100,000	0	0	0	0	0	0	2	100.0	0	0	0	0	0	0	0	2	100.0	0
100–150,000	0	0	0	0	0	0	2	100.0	0	0	0	0	0	0	0	1	100.0	0
150–200,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	100.0	0
200,000 & over	0	0	0	0	0	0	2	100.0	0	0	0	0	0	0	0	8	100.0	0
Unknown	15	53.6	2	7.1	1	3.6	0	0	10	0	0	0	0	0	0	1	25.0	3
Totals	73	46.8	26	16.7	20	12.8	17	10.9	20	16	20.3	12	15.2	24	30.4	21	26.6	6

used by contractors, though in some cases bookkeepers had been let go and, in a few, the discouraged entrepreneur had simply ceased to bother about records.

The table on types of books used by bankrupt and non-bankrupt contractors indicate a considerable contrast. Comparative figures are shown in Table 11.

The persistence of businesses carried on without books among failed contractors until a comparatively large volume of business is reached and the far greater use of double entry systems by going businesses than among failures, with an even greater difference in the use of single entry is very clear in the tables; but care should be taken to note the numbers as well as the tables since, again, such that inventory taking is regarded as unnecessary, unless the firm is one with considerable equipment, for it frequently pays the contractor, rather than to store materials in buildings to leave on the ground what surplus he has after building a house and it has become more and more a custom for plumbers and electricians to order only for a specific job, so that even though information were complete here, it would need to be segregated according to whether businesses were such as to require an inventory.

Retailers: The total number of retailers in the bankrupt and non-bankrupt groups are very similar, 248 for the bankrupts and 256 for the non-bankrupts, after chains had been excluded. Somewhat more reliance, then,

TABLE 12
ADEQUACY OF RECORDS—RETAILERS

Gross Yearly Income Dollars	Failed Businesses							Going Concerns						
	Adequate		Inadequate		Unknown		Total	Adequate		Inadequate		Unknown		Total
	No.	%	No.	%	No.	%		No.	%	No.	%	No.	%	
0– 1,000	0	100.0	7	100.0	0	0	7	8	57.0	6	43.0	0	0	14
1– 5,000	6	11.1	47	87.0	1	1.9	54	19	21.3	70	78.7	0	0	89
5–10,000	9	16.1	45	80.4	2	3.6	56	16	35.6	28	62.2	1	2.2	45
10–20,000	11	20.0	44	80.0	0	0	55	12	41.4	16	55.2	1	3.4	29
20–30,000	11	45.8	13	54.2	0	0	24	15	65.0	8	35.0	0	0	23
30–50,000	9	47.4	10	52.6	0	0	19	22	81.5	5	18.5	0	0	27
50–75,000	6	66.7	3	33.3	0	0	9	9	75.0	3	25.0	0	0	12
75,000 and over	10	90.9	1	9.1	0	0	11	16	100.0	0	0	0	0	16
Unknown	2	15.4	9	69.2	2	15.4	13	0	0	0	0	1	100.0	1
Totals	64	25.8	179	72.2	5	2.0	248	117	45.7	136	53.1	3	1.2	256

may be placed on the figures obtained, despite the problem of differing bookkeeping needs within the various types of retailers.

Retailers, whether bankrupt or not, had a low record of adequacy, 26% of the failed businesses keeping records sufficient for their needs and 46% of the going firms. The distribution can be seen from Table 12. The average (median) sized retailer was the same for bankrupts and non-bankrupts taking in $5,000 to $10,000 per year. About 9% of the failed firms did a business of $50,000 or more per year and 11% of the non-bankrupts, 26% of the bankrupts did less than $5,000 a year and 40% of the non-bankrupts. The likelihood, unchecked by any statistical evidence, however, that small firms tend to fade out when their liabilities are less than those required by law for bankruptcy petition, has already been pointed out, and may account for the greater number of small retailers in the non-bankrupt group.

For firms of less than $20,000 yearly volume, adequacy of records for bankrupts was about a fifth, that is, 37 of the 172 bankrupts of this size, while for going concerns, 30%, or 15 out of 177 had sufficient records. After this point, bankrupts showed a slower tendency to increase in adequacy as the business grew larger and $40,000 in-

TABLE 13
TYPES OF ACCOUNTING RECORDS—RETAILERS

Gross Income Dollars	Failed Business									Going Concerns								
	None		Unsys-tematized		Single Entry		Double Entry		Un-known	None		Unsys-tematized		Single Entry		Double Entry		Un-known
	No.	%	No.	%	No.	%	No.	%	No.	No.	%	No.	%	No.	%	No.	%	No.
0– 1,000	3	42.8	3	42.8	1	14.3	0	0	0	10	71.4	2	14.3	2	14.3	0	0	0
1– 5,000	25	46.3	15	27.8	10	18.5	2	3.7	2	47	52.8	26	29.3	14	15.7	1	1.1	1
5– 10,000	22	39.3	19	33.9	6	10.7	6	10.7	3	7	15.6	22	48.9	14	31.1	2	4.4	0
10– 20,000	20	36.4	19	34.5	11	20.0	4	7.3	1	4	13.8	8	27.6	14	48.3	3	10.3	0
20– 30,000	4	16.7	5	20.8	5	20.8	10	41.7	0	0	0	2	8.7	14	60.9	7	30.4	0
30– 40,000	0	0	0	0	5	41.7	5	41.7	2	0	0	1	6.3	10	62.5	5	31.3	0
40– 50,000	1	14.3	1	14.3	2	28.6	3	42.9	0	0	0	0	0	7	63.6	4	36.4	0
50– 75,000	1	11.1	0	0	2	22.2	6	66.7	0	0	0	1	8.3	6	50.0	5	41.7	0
75–100,000	0	0	0	0	0	0	2	100.0	0	0	0	0	0	1	33.3	2	66.7	0
100–150,000	0	0	0	0	0	0	3	100.0	0	0	0	0	0	1	16.7	5	83.3	0
150–200,000	0	0	0	0	0	0	4	100.0	0	0	0	0	0	0	0	3	100.0	0
200,000 & over	0	0	0	0	0	0	2	100.0	0	0	0	0	0	1	25.0	3	75.0	0
Unknown	2	15.4	0	0	0	0	1	7.7	10	0	0	0	0	0	0	0	0	1
Totals	78	31.5	62	25.0	42	16.9	48	19.4	18	68	26.6	62	24.2	84	32.8	40	15.6	2

come level was reached before adequacy was more frequent than inadequacy. With the non-bankrupts, adequacy was more frequent than inadequacy in all groups of $20,000 income or more, and all firms with an income of $75,000 had adequate records, which occurred with bankrupts only after $150,000 was reached.

The records used by bankrupt and non-bankrupt retailers show a rather marked difference, as revealed in Table 13.

Here double entry records are actually used slightly more frequently among failed than going concerns; but a far less frequent use of single entry appears. The complete absence of books, though only 5% more frequent among bankrupts than non-bankrupts appears among larger failed than going businesses, appearing among the former even until $50–75,000 sales have been reached. On the other hand, single entry records appear less frequently among the higher sales groups of bankrupts than among non-bankrupts.

Inventory taking is of particular importance among retailers for, without knowing it, the owner cannot ascertain whether he has a profit or a loss, since a larger or smaller inventory represents increased or decreased assets. Thirty-four per cent of the bankrupt retailers, that is 86, were known to take inventory and 45% or 114 of the non-bankrupts were known to take it. Bankrupt retailers took inventory at least half of the time after the business had reached $20,000 sales and non-bankrupts after $10,000, while all but two bankrupts with sales of $75,000 or more and all but one bankrupt above this figure took inventory.

CONCLUSION

A comparison of the accounting records of failed businesses with a sample, of about equal size, of going businesses has disclosed an appreciable difference in the extent of adequacy within the two groups. Tested by an analysis in which types of enterprise were held constant, the greater degree of adequacy among the going businesses persists; that is, within all types of business enterprise the records of non-bankrupts were more frequently adequate than were those of failed businesses. Tested further by an analysis in which sizes of business were held constant, the greater adequacy of records of non-bankrupts persists till a certain size, about $150,000 gross income a year, is reached, when all variation disappears and, in fact, both failed and going businesses, with one exception, are found to keep adequate records.

The objective of this article, stated at its beginning, was to furnish a test of the hypothesis that there was a concomitant variation between adequacy of accounting records and business failure or survival. Applying the figures to this hypothesis it is found that, in so far as one set of comparisons can furnish a test, there is such a strong concomitant variation as suggests a causal relation. This extends through all types of business, but it extends only to businesses which are not of the largest size considered. Since, however, the great majority of enterprises are not of very large size (in the sample of a city's business studied 46% of the firms had a gross income of less than $10,000 yearly) this presumable causal relation would apply to the great majority of enterprises.

The material presented here does not, of course, furnish a direct test of an hypothesis that *degree* of success varies with *deqree* of adequacy of accounting records. The divisions used—those businesses that have entered the bankruptcy court and those which are still in business—are gross and void of gradations. Among the going businesses those which are marginal are not distinguished from the highly profitable nor do we know whether those who were adequate in their bookkeeping methods were more successful than those who were not. Nor are degrees of failure presented among the bankrupt businesses. All the present findings say is that the probability of the presence of records sufficient to perform the function of records is greater among going firms than bankrupts within all but the largest businesses, and per contra, that inadequacy of records seems in all but the largest businesses to be one contributing factor making toward

failure. Of course, no claim is made that accounting records are an only cause of bankruptcy or that they are separable from some more inclusive factor, such as managerial ability which might account as well for good records as for other factors, which may, upon investigation, be found to distinguish bankrupts and non-bankrupts. Indeed the entire field of business enterprise theory is badly in need of more extended researches. They are the only means of getting away from the sterile and unproved generalities which have thus far been all that is available.

It would not seem unreasonable that those who regard business failure as constituting an unnecessary waste, would feel that further efforts are needed to control this aspect of business activity. In part this might be achieved by a more rigid judicial interpretation of the bankruptcy discharge act. If such interpretation were really used to deny a discharge to an applicant who has failed to keep books of account sufficient for the needs of his business rather than merely as a catch-all for the bankrupt who is *believed* to be guilty of fraudulent acts which, because of absent or incomplete records are withdrawn from proof, would this raise the general standard of accounting records kept? That it would have some effect is probably true; but the extent of effect is open to doubt. People do not generally go into business with the bankruptcy court before their eyes, even though Douglas has found that 10% of his bankrupts were repeaters. But this is not the whole picture. So far as bankruptcies are fraudulent, they depend on anticipation both of successful concealment of assets and of discharge. They involve, in a word, foresight. A higher judicial standard of bookkeeping would have to be taken into account. The question then becomes one of how far it is wise to go in penalizing the ignorant but honest bankrupt in an effort to control him who is deliberate and dishonest. Perhaps the answer would be in insisting on higher standards, as a condition to discharge, wherever a substantial quantity of assets were both traced in, and left unaccounted for. Some value in reducing the waste of bankruptcy such standards would seem to have, and at the precise point most open to control: that of deliberate dishonest practice. But this line of control calls for conscious effort to reduce the collateral injustice which its use may be foreseen to entail.

Moreover, from the point of view of failure prevention it seems somewhat like locking the barn door too late to penalize the business man after he is out of business. A general requirement of adequacy for all businesses would appear more effective. But whether the wary enterpriser opened his doors with one eye to the bankruptcy referee, or whether every beginning business man found himself faced with legal requirements, how would be know, in the absence of official specifications, that what he had would be termed adequate? The comparative figures presented show a striking difference between what is customary and what is adequate as a tool for performing the function of bookkeeping even among the businesses which are not, at least openly submarginal. Only a little over one-half of the sample of going businesses were satisfactory in their bookkeeping methods, though this low total was largely due to the prevalence of poor record keeping among retailers, who are, numerically, the largest group of enterprisers.

Such government regulations as exist are generally limited in their application or their requirements; those under interstate commerce are devoted mainly to large enterprises; code authorities required payrolls and hours; state tax authorities generally ask only gross income and require no more detailed knowledge than amount of sales. Compare this, for example, with the careful Swedes who publish not only the legal requirements but facsimilies of recommended types of records.[10] In this country buying

[10] See Nya Bokföringslagen, Stockholm, 1930. The Swedish legal requirements begin as follows: "For complete bookkeeping, the law demands a day book, inventory and balance sheet. For the simplest type of business, single entry is sufficient, i.e., entries made once and in chronological order. In general a division of items according to systematic principles is not required. The single entry system requires only personal accounts, i.e., those with customers and with creditors . . . As soon as the business takes on larger proportions, double entry, i.e., a double (debit credit) recording be-

associations, credit and trade associations have done much to substitute for official specifications by recommendations to their members. The Harvard Business School, in their efforts to accumulate reliable figures, the New York Printers, the National Hardwaremen's Association, the National Retail Trade Association, have all supplied, for certain groups, models of record keeping. But associations of this kind, voluntary as they are, are apt to gather in only the larger enterprises and the more forward-looking—in short those least in need of outside guidance. Moreover their recommended records are apt to be set up in a fashion too complex for the majority business, the small business, and not suited to its needs. If current theories which base on the enterprisers' accurate knowledge of the conditions of his business are to have application democratically and to petty enterprise as well as to the more sophisticated, a good deal of further educational work is needed; and probably new lines of its organization.

comes necessary. All business events that cause changes in the various divisions of assets and liabilities or proprietorship are listed (1) chronologically in a journal (in case of cash and credit, in a cash journal and a memo book) and (2) systematically, in a ledger . . ." Facsimile of the proper types of records are included in the official bulletin.

IN DEFENSE OF THE ACCOUNTANT

Arthur C. Kelley

Economists often take the accountants to task for loose thinking, failure to define their terms, not comprehending the nature of income, and in general for being concerned primarily with procedure instead of with the development of a consistent philosophy of accounting. No doubt much of this criticism is justified and there is much need of a more careful use of words and more precise definitions of accounting terms in the writings of accountants. Yet when the accountant turns to the writings of economists dealing with accountancy, what does he find? The fact is that many of the writings of economists disclose such a theoretical and academic type of mind, that their ideas are of very little help to the accountant in solving the problems which face him in his daily practice.

A school of economic thought has arisen which has developed and elaborated the idea that the work of the accountant is essentially that of valuation, and the balance sheet is in essence a statement showing the present worths of the expected future services which the assets will yield. The balance sheet is thus a forecast and is not an objective statement of facts. The accountant becomes a forecaster and prepares statements of opinion about what will happen in the future. This idea is surely far removed from the realities of the accountant's daily work.

Eminent economists have been known to make economic prophecies as to future trends of business activity which completely failed to come to pass. Would accountants have any better success in the field of forecasting? Hardly. It would seem that such forecasting should not be indulged in by accountants for two reasons: First, it is impossible to forecast the future income of a competitive enterprise because of the many variables in the problem, and second, the accountant's task is historical analysis and interpretation in the light of known facts.

The fundamental nature of a business enterprise under the prevailing competitive price system is to produce a service or a good, which is not used directly, but is exchanged on the market for money of the realm which flows back to the enterprise and is recorded as "sales." This money is then used to buy labor, materials and equipment which are necessary to produce the goods. Each asset is a "storage of service" and renders its own particular service thruout its life for the purpose of producing the goods (which are also services of a different type) offered for sale on the market. All the services required in the production of the goods must likewise be acquired by purchase in the market, and the monetary measure of all services used in the productive process is called the "cost of production," including here also what ac-

countants term "selling administrative and financial costs." The excess of the market price of the goods sold over the cost of production is commonly called the net income or net profit of the enterprise, and is evidenced by an increase in the value of the net assets which accrues to the benefit of the owners and is reflected by a corresponding increase in the value of the proprietorship.

This increase in proprietorship of the enterprise is deemed to be distributable to the owners, and in the case of a single proprietorship or a partnership it constitutes the proprietors' taxable income, under present Federal laws. It is evident that the income of an enterprise is a residuum or an amount left over after deducting the cost-outlays from the sales income. Being a residuum the income is determined by all the factors which affect the outgoing stream of costs (services acquired and used) and the incoming stream of services obtained by the exchange of the product on the market for money. The factors which affect these incoming and outgoing streams are of course numerous and complicated, but they must all be considered before the final enterprise income can be determined.

It is undoubtedly true that "income is, without exception, the simplest and most fundamental concept of economic science" as Dr. Canning states.[1] Its essential nature is a flow of services or desirable events running to the individual beneficiary. Thus income comprises that which sustains human life and satisfies human wants. It is the common practice to measure an individual's income by the money value of the services which he has the power to obtain during a period of time, even though this power is not exercised, that is, the income is not spent. For practical purposes it does not seem helpful to push the idea of income further and restrict its meaning to "final objective income" or the amount of services actually used. It would seem desirable to continue to define income as the power to command services which is measured in money and which flows to the individual during a period of time. This is the common idea of income and it is also the general legal concept of income as defined by the income tax statutes, subject however to many exceptions.

While admitting the supreme significance and the basic nature of the income concept, the accountant cannot admit that the work which he does, for example in preparing a balance sheet of a business enterprise, is to engage in economic forecasting and to set up schedules which are statements of opinion about the expected future income of the concern. To illustrate the impossibility of attempting to prepare a balance sheet which expresses the present worth of the future expected enterprise income, the following case will be cited. This balance sheet was prepared by a reputable and eminent firm of accountants according to the accepted principles of accounting, and depicts the condition of the concern on December 31, 1931.

X Manufacturing Company, Dec. 31, 1931

ASSETS

Cash	$ 1,371,307.52	
Accounts Rec. less Reserve	807,899.25	
Notes Receivable	84,563.00	
Inventories	5,670,685.91	
Certificate of Deposit	10,285.83	
Total Current Assets		$ 7,944,741.51
Investments		1,176,588.00
Land, Bldg. & Equip. less Res.		31,645,438.54
Deferred Charges		185,508.77
Intangibles		1.00
		$40,952,277.82

LIABILITIES AND CAPITAL

Accounts Payable	$ 3,123,973.98	
Long term liabilities	3,179,475.45	
Total liabilities		$ 6,303,449.43
Preferred Stock	$12,621,700.00	
Common Stock	14,999,415.00	
Surplus	7,027,713.39	
		34,648,828.39
		$40,952,277.82

The current assets in this balance sheet were valued at the lower of cost or market, and the fixed assets at cost less depreciation.

[1] John B. Canning, *Economics of Accountancy*, p. 175.

This statement indicates that the stockholders of the corporation had invested a total of $34,648,828 in the concern, and the creditors had loaned a total of $6,303,449, making the total cost value of the assets $40,952,277. The accountants in this case properly presented the condition of the business on the basis of historical costs, and no criticism can be directed toward them for the statement they prepared.

However, according to that school of thought which maintains "the balance sheet is wholly a forecast—never an objective determination of provable facts"[2] the above statement is completely erroneous, because it indicates the present worth of future expected income which will accrue to the owners or stockholders of this concern, is $34,648,828. As a matter of fact within one year from the date of the above balance sheet this concern went into receivership, and the income which has been earned four years after the date of the above statement is nil. The equity of the stockholders has been wiped out and the probability that even the creditors will ever receive full payment for their claims is very remote.

If the accountants in this case had been attempting to evaluate the assets and corresponding proprietorship of the business in the sense of showing the present worth of the expected future income, they were completely in error, because then they should have valued the proprietorship at zero, or very close thereto. Of course they were not attempting to do any such thing.

It is surely futile to attempt to evaluate the assets of an enterprise on the present worth basis in this dynamic business age, when styles, customs and whims of customers quickly change, when technological improvements in production are continually appearing, when the market demand for the output is continually changing because of political barriers, national egotism, wars and disasters, and when even the monetary standard of value is fluctuating. All these and many other imponderables make present worth valuations utterly impossible in the dynamic, ever-changing conditions of modern business competitive enterprise.

The accountant is not a prophet, and the sooner he admits his proper sphere of activity and his own limitations, the sooner will his true function in the business world be realized, which is primarily that of historical analysis for the purpose of business control. To be sure the findings of accountants are of the greatest importance for the present and future control of the enterprise, but this is not to say that his findings represent his opinion of the present worth of the future income of the concern.

As Mr. M. E. Peloubet[3] and Prof. A. C. Littleton[4] and others have clearly pointed out, "cost and investment" and not valuation are the concepts to which the accountant should hold fast. It is true that some accountants perhaps at times have entered where even angels fear to tread, and have given valuations, or opinions of future expected income, but this is dangerous ground on which to enter, and had better be left to forecasters and economists.

[2] See E. G. Nelson, "The Balance Sheet Approach," THE ACCOUNTING REVIEW, Dec. 1935, p. 316.

[3] *Journal of Accountancy*, July 1935, p. 54.

[4] "Value or Cost," THE ACCOUNTING REVIEW, Sept 1935, p. 272.

INFLUENCE OF THE SECURITIES AND EXCHANGE COMMISSION UPON ACCOUNTING PRINCIPLES

T. H. Sanders

ACCOUNTING REQUIREMENTS OF THE LAW

The substance of the power of the Securities and Exchange Commission, in so far as it concerns accounting, derives from that passage in the Securities Act which in effect enables the Commission to stop the issue of new securities "if it appears to the Commission at any time that the registration statement includes any untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading."[1] For the Commission the various items of a balance sheet and of an income statement are "material facts," and what in accounting parlance is often referred to as the disclosure or non-disclosure of information becomes in the law the statement or omission of material facts. The corresponding powers in the Exchange Act make it "unlawful for any member . . . to effect any transaction in any security . . . unless a registration is effective"[2] as prescribed by the Commission. It is now generally understood not only that the Commission has this power to stop the issue of new securities under the Securities Act, or to prevent the effective listing of a security upon a stock exchange under the Exchange Act, but also that any misstatements or omissions which may escape the scrutiny of the Commission and enter into the basis of transactions in the securities of the company, expose the persons responsible for such misstatements to various and much discussed liabilities and penalties.

The principles of accounting are a body of rules under which the recording in detail, and reporting in summary, of the financial transactions of a business may be accomplished in such a manner that all the important factors contributing to the showing of the company's financial condition and earnings may be made evident. In this area, the Commission's task is, therefore, identical in purpose with the dictates of accounting principles; in fact it may be said that the success of the Commission as a regulatory body will in large part be dependent upon the development and general acceptance of a body of principles upon which it can rely in the administration of the legislation committed to its charge.

A somewhat more detailed, but still very general, statement of the accounting aspects of the Commission's work is contained in those sections of Schedule A dealing with the balance sheet and profit and loss statement:

(25) a balance sheet as of a date not more than ninety days prior to the date of the filing of the registration statement showing all of the assets of the issuer, the nature and cost thereof, whenever determinable, in such detail and in such form as the Commission shall prescribe (with intangible items segregated), including any loan in excess of $20,000 to any officer, director, stockholder or person directly or indirectly controlling or controlled by the issuer, or person under direct or indirect common control with the issuer. All the liabilities of the issuer in such detail and such form as the Commission shall prescribe, including surplus of the issuer showing how and from what sources such surplus was created, all as of a date not more than ninety days prior to the filing of the registration statement. If such statement be not certified by an independent public or certified accountant, in addition to the balance sheet required to be submitted under this schedule, a similar detailed balance sheet of the assets and liabilities of the issuer, certified by an independent public or certified accountant, of a date not more than one year prior to the filing of the registration statement, shall be submitted;

(26) a profit and loss statement of the issuer showing earnings and income, the nature and source thereof, and the expenses and fixed charges in such detail and such form as the Commission shall prescribe for the latest fiscal year for which such statement is available and for the two preceding fiscal years, year by year, or, if such issuer

[1] Securities Act of 1933, Section 8(d).
[2] Securities Exchange Act of 1934, Section 12(a).

has been in actual business for less than three years, then for such time as the issuer has been in actual business, year by year. If the date of the filing of the registration statement is more than six months after the close of the last fiscal year, a statement from such closing date to the latest practicable date. Such statement shall show what the practice of the issuer has been during the three years or lesser period as to the character of the charges, dividends or other distributions made against its various surplus accounts, and as to depreciation, depletion, and maintenance charges, in such detail and form as the Commission shall prescribe, and if stock dividends or avails from the sale of rights have been credited to income, they shall be shown separately with a statement of the basis upon which the credit is computed. Such statement shall also differentiate between any recurring and nonrecurring income and between any investment and operating income. Such statement shall be certified by an independent public or certified accountant;

Anybody who reads these requirements minutely, and with attention to the literal meanings, will appreciate the significance and wisdom of the clause: "except that the Commission may by rules or regulations provide that any such information or document need not be included in respect of any class of issuers of securities if it finds that the requirements of such information or document is inapplicable to such class and that disclosure fully adequate for the protection of investors is otherwise required to be included within the registration statement."[3] In other words, the Commission is vested with a wide discretion as to what it may require by way of information, provided the object sought for is attained, namely, a complete disclosure of all material facts.

MAGNITUDE OF THE COMMISSION'S ACCOUNTING PROBLEM

This is a particularly necessary and fortunate provision when the breadth of the Commission's assignment is borne in mind. It is charged with supervision over companies in every line of business; it will have to be flexible in its requirements if the peculiar conditions of different industries are to be adequately represented. In this respect the S.E.C. is in a very different position from the I.C.C. or the F.C.C., or the state public utility commission. These latter have a relatively small and homogeneous class of operations to cover, and may as a business proposition prescribe for them with much more assurance than the S.E.C. could bring to the task of specific prescription of form and method. In fact the accounting task of the other commissions is more analogous to the development of a uniform accounting system such as many industries have individually and voluntarily undertaken for themselves, the only difference being that in the governmental field most of the commissions have power to require compliance.

The Internal Revenue Department has a jurisdiction even wider than that of the S.E.C. as regards the number and variety of businesses reporting to it, but far more narrow as regards the specific object of the accounting reports it receives. The Internal Revenue Department is concerned with devising a formula for taxable income, in which its main care must be the levying of a uniform charge on people in like financial position as to income. While the statements filed with this department should be reconcilable with statements prepared for general financial purposes, it has never been claimed that these should always be identical.

It requires to be clearly understood that the accounting rules of the S.E.C. apply strictly to registration statements filed with the Commission, which has no direct jurisdiction over the reports furnished by companies to their stockholders. It is likely that the latter will, in form and content, continue to be largely what they have hitherto been except that, in the case of listed companies or companies expecting to offer new issues, there can be no obvious inconsistencies of a material nature between the reports to stockholders and the statements filed with the Commission. The liabilities for misstatement as specified in the Securities Act and Exchange Act apply to the registration statements and not to reports to stockholders, but no company will wish to draw suspicion upon itself by discrepancies between the two. It is clear, furthermore, that

[3] Securities Act, Section 7.

both statements must come from the same common source, namely, the books and records of the company.

APPLICATION OF ACCOUNTING PRINCIPLES

It is to these records, therefore, that the principles of accounting must primarily apply, but it is also necessary that the same principles be carried through into the reports by which the books and records are summarized for those who may have an interest in them. There is no question but that the leading companies of the country have within the past twelve months scrutinized their own internal accounting practices with extreme care in the light of the requirements of the S.E.C., and wherever any material difference occurred, either in the treatment of items or in the amount of information to be given, have asked themselves whether their own practices came within the S.E.C. requirements, in view of all the latitudes there allowed.

Without doubt the S.E.C. constitutes a potent force for the realization of accounting principles as they have long been expressed in textbooks. Without doubt the accounting conversation of our business corporations will more than ever before be of the order of "yea, yea, and nay, nay"; the deliberate disregard of fundamental principles will be a far more perilous matter than it has ever been.

But for that great majority of corporations which have always wanted to do a good job in their accounts the principal difficulties have not lain in the acceptance of the general principles, but rather in their application to peculiar conditions. It is not necessary here to dwell upon the shortcomings in the past of records in which, for example, lump sum transactions have been consummated for the acquisition of entire business units without itemizing the asset and liability elements involved. Nearly every large corporation twenty years old or over has a good deal of this sort of thing in its early records, making it very difficult, if not impossible, to be very categorical in stating the amounts and description of its various property accounts. From now on changes will occur in two directions. In the first place efforts will be made to clear up old records, even when this involves arbitrary appraisals and apportionments. This was done, for example, in the case of American Smelting and Refining Company, which during the past year has for the first time divided its property accounts as between tangible and intangible items. In so doing the company stated that although the S.E.C. regulations did not insist upon the separation, yet the evident preferences of the Commission had led them to take the step. In one way or another old confusions will gradually be eliminated from the balance sheet, and the more precise practices of recent years will place the property accounts upon a more definite basis. In the second place new transactions of considerable magnitude, such as mergers or the acquisition of general properties, will be more explicitly recorded, so as to segregate the different classes of property. From a business point of view as well as for accounting purposes it will not be at all a bad thing to require the principal actors in such transactions to inventory the deal and make up their own minds exactly what they are getting in the purchase. If the physical assets are reasonably priced, and it has been thought proper to pay a larger amount for the entire business as a going concern, it would not seem that the common rule of regarding the excess as something of an intangible nature in the order of goodwill is improper. One would hesitate to make an arbitrary rule to this effect, and the Commission has refrained from doing so. Where properties have been acquired at something corresponding to the capitalized value of their earnings, and changing price levels and maintenance practices have resulted in a reproduction cost which would be far above the book values, it is not in all cases entirely necessary or just to require the management to make on oath an apportionment of that total purchase price as between tangible and intangible properties. On the other hand, they are required to do this for income tax purposes, and although the amounts arrived at for that purpose may not be completely satisfactory they at least represent one basis

for the apportionment. It would seem that, taking all requirements into consideration, it is generally desirable that a specific allocation of investment among the various assets be made.

FLEXIBILITY IN S.E.C. REGULATIONS

Reference has already been made to the freedom of choice allowed by the Commission's regulations; it seems desirable to define further the character of this freedom. It probably does not mean that the Commission would condone any kind of accounting, even though clearly expressed. The general preferences of the Commission are unmistakable, and the alternatives allowed are not designed to furnish excuses for any subterfuges in accounting practice that registering companies might see fit to present. The first requirement certainly is full disclosure, but if the methods disclosed are unsatisfactory the Commission has full power to require other information, and to issue stop orders not only for insufficient information, but also if the information supplied discloses a situation which seems to them fraudulent.[4] On the other hand, it is certain that the Commission will elicit much more constructive information by the policy it has followed than would have been obtained by a policy of specific prescriptions and prohibitions with respect to the various items of accounting statements. The general sanction (if one may now use that word in its ordinary sense) expressed in the provision that "the registrant may file statements and schedules in such form, order, and using such generally accepted terminology as will best indicate their significance and character in the light of the instructions" was evidently designed to encourage the adequate presentation of the special features of any corporation which might have occasion to register with the Commission. To have followed a contrary course, to have prescribed a form with specific instructions, would undoubtedly have distorted the showing in many balance sheets, and destroyed their true significance. It is this emphasis on an affirmative and constructive practice which has justified the high esteem in which the Commission has generally come to be held.

It is interesting to list the matters on which the Commission allows alternatives, or on which the requirement is merely for disclosure of the basis adopted. The following paragraphs constitute only a partial list, including the more important matters so treated.

In consolidating accounts considerable latitude is allowed, both in respect to what may be consolidated, and also in the treatment of intercompany items. The one thing insisted upon is that the practices adopted shall be disclosed.

The treatment of foreign balances converted into dollars, and of the resulting profit, is left to the company's discretion.

The inclusion of debatable items in current assets or current liabilities may be rested upon trade practices, if the practices are cited.

The classification of inventories, when there are important subdivisions, and the basis of their valuation, are left to be treated as the conditions of the industry and of the company may suggest.

In connection with all assets it is required only that the basis of arriving at the amounts or values shown shall be stated, but in no case is a specific basis prescribed.

The problem of the separation of capital surplus from earned surplus is allowed to be determined by what the accounting practice of the company has been, although future amounts added to surplus must be sufficiently described.

With respect to contingent liabilities the regulation states only that they must have "due consideration."

Although it is required that the different main sources of revenues shall be separately stated, yet the Commission does not carry this rule into small amounts; anything under 10% of the total gross revenues may be combined. This, however, does not refer to miscellaneous other income, from sources other than the company's principal operations. These are required to be separately shown.

[4] Securities Act, Section 17.

Schedule VIII has the appearance of a hard and fast prescription as to important items of cost, but on examination will be found to be an attempt by the Commission to elicit this information in terms conformable with whatever accounting system the company may be following. These items may be shown in the income statement proper, or in Schedule VIII, or divided between the two, according to the cost accounting and inventory practices of the registering company.

For both debt discount and expense, and discount and commissions on capital stock, the method or basis of amortization is left to the discretion of the company.

Reacquired bonds are expressly permitted to be shown as Other Security Investments (Item 9) or as deductions from Funded Debt (Item 26), but as a separate item in either case.

In the case of reacquired stock a preference is expressed for having it shown as a deduction from capital stock, or from surplus, or from the two combined; though it may also be shown as an asset under Other Security Investments, provided the reasons for so doing are given. If treated as a deduction on the liabilities side the further option is allowed of making this deduction "at either par or cost as circumstances require." Presumably any reasons of substance, whether of a legal nature or connected with managerial financial purposes, would be satisfactory to the Commission, as well as informative to investors.

No prescription is given for the basis of determining cost of securities sold, for the purpose of ascertaining profit or loss. The choice of basis is left to the company, but must be stated.

It is certain that if the Commission's staff lives up to the liberal spirit of these provisions much more helpful information will be placed at the disposal of investors than would otherwise be possible. In the case of surplus, for example, everybody recognizes the desirability of explaining its nature, in cases where it contains unlike elements in substantial amounts. But if the Commission sought to require a hard and fast legal description of the balance in surplus account as shown in the balance sheet, many companies would either be unable to comply, or would be forced to efforts of compliance with showings having the appearance, but not the reality, of precision. This is not only because of the uncertain character of amounts credited to surplus in the remote past; still more the difficulty is caused by the impossibility of allocating subsequent deductions from surplus, whether dividend payments or other charges, as between the earned and capital elements which might formerly have been therein. The result is that it may be easy for a company to say such things as: "In 1918 the sum of $5,000,000, a capital surplus item, was credited to suplus for the following reasons." It is not possible for the same company to say "There is *now* included in surplus an amount of $5,000,000 capital surplus," because all charges against surplus subsequent to 1918 may be apportioned in almost any degree as between that capital surplus item and earned surplus credits.

The liberal spirit reflected in regulations of this character, together with their adherence to the broad principles of accounting, have gone far to win the general acceptability with which the Commission's regulations have for the most part been received. In this respect these regulations have been unlike those of the Federal Communications Commission, which, in their requirements for the substitution of property costs to some prior owner for costs to the present owner, strike at the very roots of what has always been regarded as sound property accounting. It is difficult to imagine the confusion which would be introduced to accounting principles and practices if a rule of this sort became in any way generally accepted.

MANDATORY FEATURES OF THE REGULATIONS

With all this flexibility it is important to observe the sort of things which are insisted upon in the regulations of the S.E.C.

The first of these unquestionably is full disclosure of all material facts; the Commission under the law must require this, and its

whole conduct has indicated a determination to do so. Wide ranges of choice at many points have been cited; latent in these options is an implied recognition that management is responsible for the conduct of its own business, and that the primary purpose of accounting is to record what management has done in the discharge of its responsibilities, not to tell management what it may or may not do. It is safe to say that the Commission will insist upon this primary function of accounting being realized in all essential matters.

The general limits of consolidation, both as to what may and may not be consolidated, and the character of information required in a consolidation, are fairly definitely indicated. Again there is room for the handling of exceptional cases, but the spirit and intent of the requirement are reasonably clear, and could not lightly be evaded. That the Commission will take a critical view of consolidated statements which to them seem to fail to disclose important facts was made abundantly clear by its statement in the case of Baldwin Locomotive Works, in which the Commission held that the effect of a balance sheet which consolidated a subsidiary only sixty per cent owned was to "portray a net quick asset position better than that of the issuing corporation."[5]

While the Commission did not prescribe a precise form or wording for the accountant's certificate, its general character and substance are set forth. The American Institute of Accountants, in coöperation with the New York Stock Exchange, has evolved a form of certificate which has found wide acceptance, yet there is a good deal of feeling among public accountants against having any one form prescribed by law. Their view is that since the accountant is liable under the law for what he says in the certificate, the law should not put the words into his mouth, and the regulations indicate that the Commission accepted that view, at the same time prescribing in plain terms what the substantive contents of a good certificate should be.

[5] Release No. 167.

FLEXIBILITY IN ADMINISTRATION

In this matter of the part played by the auditor's certificate the ideas expressed by Professor C. Aubrey Smith in the December issue of the ACCOUNTING REVIEW are most interesting. He there cites a number of cases of which conflicting opinions might be held as to the treatment of certain matters by the registrant company. While the accounting practices of the company might be open to criticism, or even to condemnation, the company was not, in the several cases mentioned, required to restate its balance sheets and income statements, because the comments of the auditors had made the situation clear. It would seem that Professor Smith's position is well taken; it is tantamount to saying that the entire registration statement is a unit, comprising all the representations of the registrant company, and all the supporting testimony of experts. When there is any question as to the company's handling of an item it is reasonable to suppose that the public can learn more from seeing first the company's treatment and then the dissenting views of the accountant, than they could from a cut and dried presentation prescribed by the Commission. This is one of the happiest and most important lines of policy adopted by the Commission; it is in the spirit of its own regulations; it will undoubtedly make the statements available to the public more informative rather than less, and will increase the prestige and power of the Commission.

SIGNIFICANCE OF HISTORICAL INFORMATION REQUIRED

Another important requirement upon which the Commission can safely insist is that marked as "Supplemental Financial Information," Question 34 of Form 10. It has been shown above how impossible it often is to require a specific analysis of the present surplus balance; it is a very different thing, so far as the assurance with which one can speak is concerned, to state certain historical facts which have from time to time affected surplus, and which serve the purposes in mind even better than could a sub-division of the present surplus balance. Nor should it

be assumed that the items which will here be disclosed will in all cases be matter for criticism; on the contrary, it is safe to say that the great majority of them will reflect proper exercise of managerial powers in questions of financial policy, but matters on which any intelligent investor would wish to be informed. For example, during the last four years writedowns of property and plant would appear conspicuously in this section. There has been much discussion of the accounting and financial effects of such writedowns, as they work themselves out in the balance sheet and income statement; but the far more important considerations are those of a business and economic character. Many economists, as well as many business men, feel strongly that when there is a general decline in price levels it is altogether desirable that a business should reduce its fixed charges accordingly, reduce its selling prices, and thereby help to maintain or increase the volume of business, employment, and the flow of consumable goods. Whatever may be one's views on such matters they are clearly management problems of the first magnitude, which are not within the province of accounting alone to determine. After they have been determined, however, it is the peculiar province of accounting to make the consequence, as clear as possible, and this the regulations require. The Commission asks that the transactions be described as they occurred; it does not ask for the more dubious and difficult information as to how these matters stand in the present account balances.

BASIS OF PROPERTY ACCOUNTING

In connection with this same question of property "values" it is interesting to note that the Commission has, by the language of its regulations, lent support to the view, pretty generally accepted by accountants, that it is not the business of the accounts to reflect the "value" of the properties and plant. For lack of a better word we have all talked somewhat freely of "values" and "valuations," understanding in our own minds that what we were thinking about was the statement of assets on a cost basis, and the subsequent periodic apportionment of those costs to income. To those not primarily trained in accounting the discussions of value and valuation have always been confusing. The Commission has at least refrained from adding to this confusion, when in Schedule II it speaks primarily of the balances in the property accounts, additions and subtractions at cost, and does not use the word "value." Thus the emphasis is laid upon changes in the amount of property resulting from expenditures and retirements during the year, which are the important matters, and not upon the "value" of the whole property, which in a going concern of some age is a highly dubious and relatively immaterial fact.

With regard to current assets and current liabilities the effect of the regulations is to require a strict definition of the totals, and of the component parts which enter into the showing of the current ratio. Border line items frequently occur, the inclusion or exclusion of which in the current bracket may be debatable; but it is certain that the company and its accountants have more information on the subject than anybody else, and they are called upon to give their judgment on the question by the requirement that the total of current assets and of current liabilities shall be shown.

SOME PRINCIPLES OF INCOME DETERMINATION

An interesting example of the kind of pressure the Commission is able to bring to bear, without prescribing a fixed rule, occurs in the regulations pertaining to the income statement for investment trusts, as given in the Instruction Book for Form 15. First of all, for income the registrant is required to "state separately the total of income from (a) cash dividends, (b) interest, and (c) other income (specify)." Then it is required that the registrant "state, as to any dividends other than cash, the basis on which they have been taken up as income and the justification alleged, if any, for such action."

This is a plain hint that ordinarily the Commission would view the treatment of a stock dividend as income with marked disapproval; it is implied that in many cases

no justification can even be alleged for such a practice, but it is recognized that regularly recurring stock dividends, in amounts not greater than the current earnings of the declarant company, may reasonably be treated as income, and that other circumstances may conceivably arise which would justify such a practice. By requiring the statement of the particular circumstances which are claimed to justify, or at least explain such accounting, the Commission not only causes the public to be apprised of those circumstances, but also emphasizes their exceptional character, and the fact that they are not to be regarded as satisfactory for general practice.

After all the ordinary expenses for supervision and management, and even unusual expenses, have been deducted from the income as above defined, and after the provision for income taxes, a balance of income (Item 9) is obtained. This amount is clearly regarded as the ordinary income of an investment trust, but following it are provided items for gain or loss realized, first from security transactions, and next from transactions in other investments, to which items is appended the following note:

> Persons whose policy is to engage primarily in trading and who use, in determining their income for income tax purposes, opening and closing inventories on a basis prescribed by the United States Treasury Department regulations relating to the income tax, may report under caption (1) above, under a subcaption specially designated, gains or losses called for under captions (10) and (11). In such case, a footnote to the profit and loss statement shall indicate that the policy of the person is to engage primarily in trading.

Here again the Commission shows itself conversant with the very different types of business known as investment trusts, and in particular with the fact that these differences have not hitherto been adequately called to the attention of the investing public. The very name "investment trust" implies a certain fixity of the investments, with only occasional changes such as in the management's discretion are thought likely to maintain the integrity of the capital invested in the trust. A surprising number of well informed people do not understand that, operating also under this name "investment trust," are numbers of businesses which buy and sell securities like groceries, aiming to make the increase between the buying and selling price their principal source of income. When such people are first confronted with this fact they are apt to say: "Then they should not be called 'investment trusts.' " The Commission has refrained from going the length of requiring such businesses to take a different name, but in the paragraph cited above has required that they shall announce the character of their business in explicit terms and not leave innocent folk under the impression that they are putting their money into a literal investment trust, if in fact it is a security trading company.

It ought to be added that there is no necessary stigma attaching to this trading business providing all interested parties, especially the investors, know what they are about. Securities properly issued are perfectly legal commodities, and if numbers of investors are willing to entrust certain managers with their money for the purpose of buying and selling such commodities, there is no good reason why they should not be permitted to do it. From the fact that the Commission has made provision in this way for the results of such operations to be shown, a member of the public may infer that it recognizes, without protest, the existence of such business, subject only to full disclosure of its nature.

EFFECTS OF THE REGULATIONS

The general effect of these regulations will undoubtedly be to strengthen the hands of all who are concerned in good accounting. Company accountants and public accountants will be able to point to these requirements in support of what they regard as necessary for accurate statement and full disclosure. While the Commission has endeavored to make its regulations liberal, practical and adaptable to the greatly varied conditions of business, yet it is reasonable to believe that accounting principles, as embodied in the published statements of corpo-

rations, will look more like the accounting principles taught in colleges than ever before. And this will be true whether or not the statements are filed with the Commission; it would be absurd to suppose that in the circumstances reports to stockholders, or any other publications by business corporations, could show any material divergences from statements filed with the Commission. Company and public accountants all over the country have that idea clearly in mind.

CONVENTION REPORT

American Association of University Instructors in Accounting—Proceedings of the Twentieth Annual Convention, New York

The twentieth annual convention of the American Association of University Instructors in Accounting was held in the Hotel Commodore, New York, on December 27–28, 1935. The program was as follows:

Friday, December 27, Morning Session

General Topic: Accounting Theory; Chairman, George O. May, Price, Waterhouse & Co.

Papers were read by—

- William Morse Cole, "What Do We Mean by Cost?", with a discussion led by C. Oliver Wellington
- A. C. Littleton, "Changing Theories of Income," with a discussion led by Walter A. Staub
- H. R. Hatfield, "Depreciation," with a discussion led by William H. Bell
- W. A. Paton, "The Valuation of a Business Enterprise," with a discussion led by Samuel J. Broad

Friday, December 27, Afternoon Session

General Topics: Accounting Education and Specialized Accounting; Chairman, Harvey G. Meyer, first vice-president, American Association of University Instructors in Accounting

Papers were read by—

- Roy B. Kester, "Education for Professional Accountancy," with a discussion led by Warren W. Nissley
- Stanley E. Howard, "Accounting Instruction in the Liberal Arts Curriculum," with a discussion led by Andrew Barr
- Ira N. Frisbee, "Accounting for Income of Municipalities," with a discussion led by D. M. Shonting
- C. Rufus Rorem, "Hospital Accounting," with a discussion led by Monroe Carroll

Saturday, December 28, Morning Session—Joint Meeting with Teachers of Business Law in Collegiate Schools of Business

General Topic: Accounting and Law; co-chairmen, Nathan Isaacs, Harvard University and F. H. Elwell, University of Wisconsin

Papers were read by—

- Thomas H. Sanders, "Influence of the Securities and Exchange Commission on Accounting Principles"
- David A. Buckley, "Tax Litigation before the Tax Unit in Washington," with a discussion led by James L. Dohr
- Paul M. Green, "Some Problems in Government Accounting"

Meeting of the Executive Committee

The executive committee met at noon on December 27, 1935 in the Commodore Hotel, New York City, with the following members present: H. S. Noble, H. G. Meyer, J. B. Taylor, E. L. Kohler, G. H. Newlove, J. L. Dohr, and C. F. Schlatter. C. W. Collins and H. C. Greer were unable to be present. After considerable discussion of the affairs of the association, motions were adopted providing that the secretary-treasurer be instructed to withdraw $100, the remainder of the amount voted to him for services in 1934; that the editor and the secretary-treasurer be paid $350 each as compensation for their services in 1935; that Professors E. J. Filbey and H. H. Baily of the University of Illinois be appointed to audit the books and records of the secretary-treasurer for 1935.

Business Meeting of the Association

The business session was called by President Noble at 2:00 P.M. on Saturday, December 28.

The president called for reports from the secretary-treasurer and from the standing committees. The reports follow.

Report of Secretary-Treasurer

On January 1, 1935, the association had 497 members. During the year, 40 new members were added and 60 old members resigned or were dropped, making a net decrease of 20 members and leaving 477 members as of December 31, 1935. Between 50 and 60 new members have been obtained for the year 1936 and have not been counted in the foregoing figures. The 60 members who resigned or were dropped in 1935 owed dues to the amount of $326. The secretary-treasurer made considerable effort to collect this amount, but having failed, he wrote it off against the reserve for doubtful dues receivable. Of the 477 members as of December 31, 1935, 380 have paid their dues to date, 81 owe for 1935, and 16 owe for 1934 and 1935.

In 1935, 205 regular subscriptions and 64 student subscriptions were sold. Also 88 single copies were sold at $1.00 and 66 copies at a differential cost of 18 cents each. Contributors to the magazine were the only purchasers at the differential cost price.

During 1935, 20 full pages and 9 half pages of advertising space were sold, equivalent to 24-1/2 full pages. For this space the Association received $491.25.

The secretary-treasurer also presented a balance sheet of December 23, 1935 and a statement of income and expenses for the period from January 1, 1935 to December 23, 1935.

On hearing the report of the secretary-treasurer, motion was made, seconded and carried that the report be accepted subject to the findings of the audit committee.

The standing committees reported as follows:

Committee on Constitution and Bylaws. W. A. Paton reported that his committee had taken no action and had no recommendations to make.

Committee on Membership. Chairman H. G. Meyer reported by describing the set-up of his committee. The committee divided the country into five districts with a chairman and a subcommittee for each district. Helps of various kinds such as the names of members in good standing in each district and suggestions as to methods of procedure were sent to the subcommittees. Chairman Meyer complimented the subcommittees for the excellent work they did in obtaining 40 new members for 1935 and from 50 to 60 new members for 1936.

Committee on Exchange of Teaching Material. No report.

Committee on Terminology. The American Institute of Accountants has asked for the coöperation of the American Association of University Instructors in Accounting in shaping a set of definitions of accounting terms. A special committee of the Institute had drawn up suggested definitions for something over 1,000 terms, and copies of these were furnished to this association through Mr. E. L. Kohler of the Institute's committee.

President Noble appointed the undersigned as members of a committee of the A.A.U.I.A. to carry out this work. The definitions proposed by the Institute have been divided into groups, and each member of the committee has been working on one of these groups of definitions. As soon as the work of the individual committee members is completed, the suggestions for revision of the Institute's proposed definitions will be reassembled and coördinated, and referred back to the Institute. It is hoped that this work can be completed early in 1936.

George H. Newlove
H. G. Walker
Ralph C. Jones
J. B. Taylor
E. A. Heilman
Perry Mason
Howard C. Greer, *Chairman*

Under a call for new business, R. B. Kester responded by directing the attention of

the meeting to the opinion held by some that the activities of the association were not all that they should be. He expressed the opinion that the purposes and membership of the association should be broadened. He pointed out that such an organization as ours is the logical one to carry on organized research in the field of accounting theory, but is hindered to a very considerable degree by its name and limited membership. He told the members present of the American Accounting Association incorporated recently in the State of Illinois by a small group of members to engage in research in accounting. He expressed the opinion that there was hardly room for both the American Association of University Instructors in Accounting and the American Accounting Association, and asked for expressions of opinion of the members present as to what might be done about the matter.

A considerable amount of discussion followed. Messrs. Elwell, Chamberlain, Littleton, Rorem, MacFarland, Stevenson, Scovill, Kohler, Blough and Jones announced themselves as favoring the merging of the American Association of University Instructors in Accounting into the American Accounting Association. The consensus was that the time had come to broaden the scope of the association which seemed difficult, if not impossible, to do under the old organization of the American Association of University Instructors in Accounting.

Lewis Gluick expressed the opinion that to start a fourth accounting organization was not advisable when the present tendency of the two larger organizations is toward consolidation. Herman C. Miller said that those interested in research could have joined the existing organization, and that its constitution names "research" as one of the objects of the association.

Upon motion made, seconded, and carried, the meeting resolved itself into a committee of the whole to consider what action should be recommended to the membership of the American Association of University Instructors in Accounting.

The committee of the whole immediately went into session and requested President Noble to continue in the chair. R. B. Kester asked for a show of hands of those in favor and of those opposed to recommending a merger. There were no hands raised in opposition, and, the vote being an informal one, no count was made.

After considerable discussion, the committee of the whole decided to recommend to the members assembled that they—

(1) Favor the merger and recommend it to those members who could not be present at the discussions.
(2) Elect officers for the year 1936.
(3) Adjourn the business meeting of the American Association of University Instructors in Accounting.
(4) Reconvene as the American Accounting Association and elect the same officers chosen by the American Association of University Instructors in Accounting.

The committee of the whole adjourned.

The business meeting of the American Association of University Instructors in Accounting was then resumed and President Noble reported the recommendations of the committee of the whole.

C. R. Rorem made the following motion: "Resolved, that the executive committee be empowered to submit to the members the proposition of transferring their membership and the net assets of the association to the American Accounting Association, such transfer to become effective if two-thirds of the members who cast their vote within 30 days following the mailing of the proposition favor it."

The motion was seconded and carried. Some time after the president had announced the result of the vote, it was suggested that a count be taken and reported to the members not present. As the time was late, a number of members had left the meeting, but the official count of those remaining indicated 39 in favor and 1 opposed, all members present voting. One member who had counted the first vote reported, unofficially, 51 in favor and 1 opposed. H. T. Scovill asked to be placed on record as casting the vote in opposition.

President Noble then called for the report

of the nominating committee. R. A. Stevenson reported the nominations for officers for 1936 as follows:

For president	E. L. Kohler
For vice-presidents	H. C. Greer
	G. A. MacFarland
	A. C. Littleton
For secretary-treasurer	J. B. Taylor
For editor of the ACCOUNTING REVIEW	E. L. Kohler

It was moved, seconded and carried that the secretary be instructed to cast a unanimous ballot for the election of the officers nominated.

R. A. Stevenson moved to instruct the secretary to spread upon the minutes a resolution thanking the retiring officers for their services; the motion was carried.

Meeting adjourned at 4:15 P.M.

CHAS. F. SCHLATTER
Secretary-treasurer

Subsequently the report of the auditing committee was filed with the president. This report follows:

Report of Auditing Committee

American Association of University Instructors in Accounting:

We have audited the books and accounts of your secretary-treasurer, Dean Charles F. Schlatter, for the year ended December 31, 1935, and . . . in our opinion, the following balance sheet and statement of income and expenses correctly set forth, respectively, the financial position of the association as of December 31, 1935, and the operating results for the year ended on that date.

(signed) EDWARD J. FILBEY
H. H. BAILY
FRANK HIGGINBOTHAM
Auditing Committee

AMERICAN ASSOCIATION OF UNIVERSITY INSTRUCTORS IN ACCOUNTING

BALANCE SHEET, December 31, 1935

Assets

Cash in bank			$1,314.76
Receivables—			
Dues, less reserve for bad debts of $290.00		$ 126.00	
Advertising		113.75	
Subscriptions, less reserve for bad debts of $14.00		35.84	275.59
Office equipment			22.00
Total assets			$1,612.35

Deferred Income and Earned Surplus

Unearned—			
Dues		$ 224.00	
Subscriptions		418.15	$ 642.15
Earned surplus—			
Balance December 31, 1934		$1,377.10	
Deduct—Net loss, 1935		406.90	970.20
Total deferred income and earned surplus			$1,612.35

STATEMENT OF INCOME AND EXPENSE FOR THE YEAR ENDED DECEMBER 31, 1935

Income:			
Dues		$1,906.00	
Subscriptions		941.16	
Advertising		491.25	
Interest on investments		62.87	
Reprints		3.63	
Total income			$3,404.91
Expense:			
Accounting Review		$2,310.96	
Compensation—			
Secretary	$450.00		
Editor	350.00	800.00	
Clerical help		312.70	
Stationery and postage		220.84	
Loss on bad debts, less recoveries of $26.00		156.00	
Convention expense		10.71	
Exchange and check tax		.60	
Total expense			3,811.81
Net loss			$ 406.90

ORGANIZATION MEETING OF AMERICAN ACCOUNTING ASSOCIATION

Immediately following the business meeting of the American Association of University Instructors in Accounting, the members present reconvened as the American Accounting Association, nominated and elected as officers the newly elected officers of the American Association of University

Instructors in Accounting, approved and ratified the proposals of that association, and instructed and authorized the officers to take such steps as might be necessary to perfect the organization of the American Accounting Association.

Meeting adjourned at 5:00 P.M.

CHAS. F. SCHLATTER
Acting Secretary

On January 10, ballots were sent by mail to all members of the Association, calling for a vote on (a) the transfer of the net assets and membership of the American Association of University Instructors in Accounting to the American Accounting Association, and (b) the form of constitution or bylaws of the new association. Up to the time of the meeting of the executive committee on February 23, 1936, the vote stood at 308 for and 28 against, and by authority of the resolution adopted at the convention, the executive committee proceeded at once with the transfer of the assets and membership to the new association. The president was instructed to notify the members of the results of the mail ballot and to announce the completion of the organization of the American Accounting Association.

The bylaws of the new association follow:

AMERICAN ACCOUNTING ASSOCIATION
BYLAWS

I. *Name, Organization, Purposes.* The name of this organization shall be AMERICAN ACCOUNTING ASSOCIATION. The form of organization shall be that of a nonprofit association, incorporated under the laws of the State of Illinois. The objects of the Association shall be:

1. To encourage and sponsor research in accounting and to publish or aid in the publication of the results of research.

2. To develop accounting principles and standards, and to seek their endorsement or adoption by business enterprises, public and private accountants, and governmental bodies.

3. To promote studies of accounting as an agency of control of business enterprise and economic affairs in general.

4. To improve methods of instruction and to demonstrate the social benefits of a more widespread knowledge of accounting.

II. *Membership and Dues.* Accounting teachers, public and private accountants, governmental accountants, and other persons interested in the advancement of accounting shall be eligible for membership in this Association. Nomination for membership may be made by any member; election shall be accomplished in such manner and shall be subject to such conditions as the executive committee may from time to time determine.

Dues, as determined annually by the executive committee and approved at the annual meeting of the Association, shall be payable in advance at the beginning of each calendar year or in the case of a new member such fractional calendar year for which his membership shall first be effective. Any member ten months in arrears shall be dropped from the membership roll; such member may thereafter be reinstated by action of the executive committee and payment in full of the amount in arrears. A life membership shall be available upon payment of $100.

III. *Administration.* The officers of the Association shall be a president, three vice-presidents, a secretary-treasurer, an editor, and a director of research. The term of office in each case shall be one year from the date of election, except in the case of appointments to fill vacancies. Election to office shall take place at each annual meeting of the Association under such procedure as shall be determined by the executive committee. All officers shall serve without compensation except in the case of the secretary-treasurer, editor, and director of research; and in these cases the amount of any honorarium paid shall be fixed by the executive committee. Interim vacancies shall be filled by action of the executive committee.

The administration of the affairs of the Association, except as otherwise provided herein, shall be vested in an executive committee consisting of the officers as aforesaid and the three ex-presidents last holding the office. The president shall act as chairman of the executive committee, but otherwise the committee shall formulate its own rules of procedure.

There shall be committees on constitution, publications, research, and membership and such other committees as shall be determined by the executive committee. Committee members shall be appointed by the president.

The secretary-treasurer shall be in charge of the membership roll and of the finances of the Association, under the general supervision of the executive committee.

IV. *Meetings.* The Association shall hold an annual meeting at such time and place as may be determined by the executive committee. This meeting shall be for the purpose of the presenta-

tion and discussion of subjects in accounting and allied fields of interest to the membership and to receive reports, elect officers, and transact such other business as may come before the Association.

V. *Publications and Research.* The Association shall publish a quarterly journal to be known as the ACCOUNTING REVIEW which shall be devoted to matters consistent with the objects of the Association. The immediate administration of this periodical shall be in the hands of the editor, with the assistance of the committee on publications.

It shall be the policy of the Association to issue or sponsor the issuing from time to time of special studies and results of research as separate publications. This program of special publications shall be under the immediate supervision of the director of research, with the assistance of the committee on publications and the committee on research, but no such publication shall be issued without the explicit approval of the executive committee.

The director of research, with the assistance of the committee on research, shall maintain contacts with research projects in the field of accounting and allied subjects and shall make an annual report thereon to the executive committee and to the Association, including recommendations as to any steps which might be taken by the Association in furthering projects. If and when sufficient funds are available it shall also be the duty of the director of research to propose specific research projects to be conducted under the auspices of the Association, and, upon approval of the executive committee, to launch and supervise such undertakings.

VI. *Amendment.* These bylaws may be amended by two-thirds of the members voting at any annual meeting or voting through a mail referendum. Proposed amendments shall be approved by the committee on constitution and by the executive committee before their submission to members.

THE ACCOUNTING EXCHANGE

INNOVATIONS IN TEACHING ELEMENTARY ACCOUNTING

OBJECTIVES. The university course in elementary accounting taught at the undergraduate level should serve two general purposes: first, to serve as a survey course to the general field of business—to acquaint the student with business terms and practices—to teach a thorough understanding of the theory of accounts—to indicate in as many ways as possible the use which may be made of accounting data in intèrpreting past results and present conditions and in making changes in policies and procedures to improve results in the future; second, to teach certain techniques of record keeping which will prove useful to the student if the occasion arises when he should find it necessary to keep records of some kind—to instill habits of accuracy, neatness, timeliness, system and order.

The second of these two objectives is too often neglected in university classes in elementary accounting. A large number of university professors of accounting have the idea that the first of these groups of objectives is the only one which should be recog, nized on the university level of education with the result that large numbers of students, whose university training is limited to one or two years, leave with less preparation for the business world than they might have had. It is not possible to separate the two groups of purposes. They must be taught simultaneously where both are to be recognized.

Development of the Balance Sheet. The first general unit of work in the accomplishment of these objectives should be an attempt to teach a complete understanding of balance sheets of business firms. In order to provide for a complete understanding of double entry theory, one should begin with the idea that property is the basis or foundation of all business enterprise. No business can operate without using property; every business is working for the sole purpose of increasing its property. Under existing laws in our country, anything that is property is owned: or all property is owned. As a result of these observations it follows that the thing with which business is most concerned, property, has two aspects: the prop-

erty itself, and the rights to that property that we term ownership. From the standpoint of value these two aspects of property are inseparable and equal. Hence our fundamental accounting equation: the value of the assets equals the value of the equities. An expansion of this equation results in a differentiation between liabilities and proprietorship. We then have the equation "value of assets equals value of liabilities plus value of proprietorship." Further expansion of this equation, showing each of these elements of the equation in detail, results in the balance sheet.

The balance-sheet form, classifications and understanding of all common terms thereof will also be a part of this first teaching unit. A study of actual balance sheets, published by our larger corporations, will indicate how general practice complies with and is contrary to accepted practice. The ordinary and more common balance sheet ratios and their significance should be introduced at this point. With the completion of this unit of the work by the end of the first half of the first semester, or later, the student will have a vast fund of knowledge of business management, business terms and business organization. Specifically, among other things, the student will have some understanding of the meaning and use of the terms: fiscal period, expense, income, accrued expenses, comparative statements, current ratio, working capital, inventory turnover, net-worth ratios, current assets, fixed assets, liabilities, depreciation, valuation of assets, book value of assets, corporations, partnerships, single proprietorships, and budgets. He will also have acquired considerable facility in the technique of balance-sheet preparation. Numerous problems should be given in this unit dealing with balance sheet preparation, ratio determination and the use of this accounting information in deciding questions of policy for future operations.

The Corporation as the Legal Unit to Introduce the Subject. The second unit of work will comprise instruction as to the methods of collecting the information on the accounting records for the preparation of the financial statements at the close of the fiscal period. At this point several innovations from the orthodox method of procedure may be used which the writer believes are helpful as teaching devices. The first is the use of the corporate form of enterprise as the type of legal organization for which business records are first introduced.

The reasons for such procedure are as follows: The student is better able to grasp and understand the meaning of proprietorship or net worth of the business as distinguished from total net worth of the owner. Where the single proprietorship enterprise is used to introduce the subject it is difficult to differentiate, in the mind of the student, the transactions of the business and those of the proprietor. The business does not so easily assume the form of an entity. It is also easier to explain to the beginning student the effect of business operations resulting in profits or losses by showing their effect upon surplus rather than on the capital and personal accounts of the proprietor.[1]

Many accounting instructors disagree with and object to this viewpoint. Much of the objection can be laid at the door of tradition, or to improper understanding of the possibilities, or to lack of adequate study of the innovation. The writer, as one who had tried and used both the traditional single proprietorship introduction and the corporation introduction, can testify without qualification to the outstanding teaching advantages of the latter.

The Firm Selling Services as the Introductory Business. There are three types or kinds of business for which records are kept. These types are classified as service organizations, merchandising organizations and manufacturing firms. They are listed above in the order of difficulty and complexity of the record keeping problems. It seems logical to introduce the student to the easiest and least complex type first—the concern selling services.

A business organization whose main source of revenue is the sale of services, such as a

[1] See Finney, Introduction to Principles of Accounting, Preface page v, for further discussion of this point.

contractor or bus company, has no inventory problems with which to deal in keeping its records. This eliminates markup problems, makes it possible for the student to realize the direct effect of income and expense upon surplus or proprietorship, and reduces to very simple procedure the problem of closing the books at the end of the fiscal period. The accounting cycle for such a concern may be completed without introducing an unduly large number of types of transactions.

After the accounting cycle has been completed with the concern selling services as a basis, by gradual stages merchandising transactions may be introduced. Then transactions for firms engaged in manufacturing may be introduced.[2]

The Work Sheet Omitted. All of the elementary accounting texts which the writer has examined have introduced the work sheet rather early as a step in the accounting process. Such device seems to serve no useful purpose. It is not used by the industrial or commercial accountant for the purpose of preparing statements, but is used by the public accountant or auditor for the purpose of taking off an adjusted trial balance from the client's records and proceeding to make such further adjustments as he deems necessary for certification of the financial statements. One might as well record all transactions on a work sheet as just the adjustments. There is no advantage to be gained from the standpoint of the student in doing the extra work necessary in preparation of the work sheet. It should be omitted.

Merchandise Accounts. The problem of handling transactions with purchases and inventory arises with the introduction of merchandising transactions. It is customary to maintain separate accounts with each, the inventory account being an asset account whose balance, the inventory of merchandise on hand at the end of last period, remains unchanged during the period, and the purchases account being classified as a temporary proprietorship or nominal account in which is recorded purchases of merchandise during the next fiscal period. This procedure seems illogical to the beginning student, as he cannot see why merchandise purchased during the period results in a reduction in proprietorship when an asset is received. Neither is it easy to distinguish between the merchandise on hand at the beginning of the period, in the merchandise inventory account, and the merchandise purchased during the period, as recorded in the purchase account. Entries necessary at the end of the fiscal period to adjust the merchandise inventory account are troublesome.

These difficulties will be eliminated if one account is used to introduce merchandising acquisition transactions. The account can be designated as Merchandise or any other appropriate name. Its use will *not* be similar to the old Merchandise account which recorded all transactions with merchandise, both acquisition and distribution, but will contain only transactions with inventory, purchases, freight in, purchases returns and allowances, and cost of goods sold—those transactions with merchandise which are recorded at cost price. It will be classified as an asset account. The balance of the merchandise account, then, will represent the inventory on hand at the close of the period, no adjustment being required. The account is to be charged with inventory on hand at the time of starting the records, subsequent purchases, freight thereon, and credited with purchases returns and allowances and cost of goods sold.

The cost of goods sold for the period will be determined at the close of the period either through perpetual inventory cards, the accumulation of cost information on sales invoices, or through the usual method of a physical inventory at the close of the period deducted from the net merchandise costs to date. The net merchandise costs to date will be the balance of the merchandise account at that time. The entry to record the cost of goods sold will be a debit to the Profit and Loss account and a credit to the Merchandise account, leaving the inventory at the close of the period as the balance of the account. This Merchandise account may

[2] For a complete presentation of this idea in textbook arrangement, see Finney, Introduction to Principles of Accounting, Chapters 1–20.

be subdivided later into the orthodox accounts if the instructor desires to conform to practice, after the student has developed sufficient grasp of accounting principles to enable him to make the shift without difficulty.

Adjustments. Difficulty in recording and understanding two other items usually develops at this point under the usual methods of presenting them. The first concerns deferred expense and income items at the close of the period. It seems best to record all deferred expense and income transactions as assets and liabilities at the time they are originally recorded, arbitrarily making those transactions such that it will appear that the item is an asset or liability at that time. Then, at the close of the period, those items which have, since recording, become expense or income may be transferred to the appropriate Expense and Income accounts. After the student understands quite thoroughly the nature of deferred expense and income items it will be possible to record the purchase or sale thereof directly in expense and income accounts, and at the close of the period to transfer the unexpired portion to the appropriate deferred expense and income accounts if the instructor so desires.

A second matter of difficulty occurs with adjusting entries at the close of the period. Because they are segregated in a separate chapter and given separate treatment, students seem to acquire a complex as to the difficulties of recording such transactions. They are essentially the same as other transactions, a record thereof being made for expediency only once each fiscal period. The similarity of adjusting entries to other transactions, or the fact that they are not difficult, may be emphasized by recording them as a part of the entries for the period and taking the first trial balance of the ledger after the adjustments have been made. There is no more justification for taking a trial balance before the adjustments have been made than for taking one on the seventeenth of the month. The trial balance taken after adjustments then serves as a basis for preparation of annual statements and further eliminates the necessity of the work sheet.

Closing Entries. The last step in the accounting cycle is the process of closing the books. Here again, most texts make the explanation and understanding of the process much more difficult than necessary. It seems that the primary purpose of closing entries is to close the temporary proprietorship or nominal accounts and to transfer the net profit for the period to the appropriate vested or permanent proprietorship accounts. Such purpose can be accomplished with one journal entry, debiting all of the nominal accounts with credit balances and crediting all of the nominal accounts with debit balances and debiting the net loss or crediting the net profit to the appropriate permanent proprietorship account. Such an entry makes the closing process very simple. Information which may be desired concerning these accounts can be obtained from the formal Profit-and-Loss Statement and Surplus Statement and need not be repeated on the ledger.

Special Journals. Most accounting texts introduce special journals at some arbitrary point in the procedure of teaching the student the technique of record keeping. The point at which they should be introduced is probably immaterial, although there is some justification for introducing them as early as possible. Their use should be de-emphasized, however. The procedures and forms therefor, vary from firm to firm. There is a very great lack of uniformity in practice regarding them. Except in a restricted sense, therefore, the information gained and the time spent in the study of so-called special books of original entry is valueless.

The writer has tried all of the foregoing innovations and, in his estimation, they eliminated many of the teaching problems in elementary accounting. The only difficulty has been the dearth of adequate text and problem material to fit these changes. Comment and criticism of these ideas will be welcomed.

MERRILL B. DILLEY

BOOK REVIEWS

The National Recovery Administration. An Analysis and an Appraisal. Leverett S. Lyon, Paul T. Homan, George Terborough, Lewis L. Lorwin, Charles L. Dearing and Leon C. Marshall. (Washington, D. C. The Institute of Economics of The Brookings Institution, 1935. Pp. xxi, 947. $3.50.)

According to the "Director's Preface," this is the fifth of a series of studies of the NRA undertaken by the Institute of Economics under the immediate direction of Leverett S. Lyon. There are seven parts and several appendices. Part I, "The Underlying Law" is the work of Mr. Lyon and Mr. Homan. Its three chapters deal chiefly with Title I of the National Industrial Recovery Act. Accordingly, its background and provisions are presented and with respect to its objectives it is said that " . . . those most closely concerned with drafting or sponsoring the act had themselves vague ideas of what was to be done . . . ." Part II, "Administrative Organization and Procedure" early refers to " . . . the extent to which all phases of the NRA organization and operation have been founded upon executive and administrative discretion rather than upon legislative mandate." Confusion was apparent from the first and "At the end of the first year . . . the NRA was a sprawling, poorly coördinated, and relatively ineffective organization" (p. 67). Apparently the chief disturbing factors were found in " . . . the absence of clearly defined policy and the consequent vacillation in method."

To understand the code-making process, " . . . the bargaining process must be retained at the center of the picture." Moreover, there was a " . . . rarity of orderly and convincing presentation of factual evidence" and a casual passing over of code provisions without analysis or clarification. " . . . the subtle, yet omnipresent influence which the Legal Division . . . exercised upon the process of code negotiations" must also be taken into account. In addition, there was a vast expenditure of time and money " . . . in the effort to establish and administer insignificant codes." As for actual administration it is said that trade associations played a large part. Indeed, these associations were a factor in the regional organization of administration. Again, " . . . the NRA has in a majority of instances allocated controlling power to trade associations . . . ." Still, " . . . in only about one code out of four is the membership of a code authority exclusively dictated by a trade association." It is not surprising, therefore, to read that " . . . under the codes . . . there resides a considerable power to restrict the productivity of the economic system . . . ." Accordingly, the authors may well say that " . . . it is not exactly a desirable development that a vast body of business law be administered by agencies which feel free to engage in administrative modifications of the law" (p. 253). They conclude that "All paths of examination of code administration converge upon fundamental conclusion, that the primary problems arise out of the desire to control the market." Moreover, "Codes were . . . given the force of law in almost complete absence of knowledge concerning the probable economic consequences." The brilliant work of writing this section was done by Mr. Dearing and Mr. Homan.

In writing Part III, "The Wages and Hours Provisions of Codes," Mr. Marshall has done a difficult thing well. Only a careful reading of his work will reveal the extent of the difficulties confronted by him. By working through a mass of material he was able to conclude that "What now stands upon the books is a body of rules which . . . is unsatisfactory technically at law, incapable of effective administration, and unoriented as to economic policy" (p. 404). Mr. Lorwin develops Part III, "The NRA and Industrial Relations." He is interested chiefly in the extent to which " . . . the work of the NRA in trying to put into effect the labor policies of the NIRA has tended to reshape American labor relations . . . ." He labors diligently and for the most part effectually to present an orderly analysis of a disorderly subject. Mr. Lorwin concludes that the company-union movement received more stimulation than trade unionism. Thereby multitudes of American workers received their first impressions of collective bargaining. Taken as a whole, " . . . the effectuation of the Recovery Act . . . has been a bundle of missed opportunities, doubtful compromises, and unpremeditated achievements. . . ."

Part V, "The NRA and the Trade Practice Problem,". is the effort of Mr. Lyon to produce some sort of order in another turgid aspect of the subject. This is achieved after the analysis of the first 500 approved codes. He finds that NRA, through several devices and in a wide range of industries, "shifted an important measure of control over prices away from individual determination and increased the degree of influence and control of industrial groups" and " . . . recovery was hindered rather than helped by the extensive transfer of power over prices . . . " (p. 621). Equally effective is his analysis of "Power over Production," (Ch. XXIV), "Competition" and "Indirect Pricing." He finds "The weakness of the NRA as an institution of government in relation to trade practices . . . in its lack of power, if it determines policies based upon sound social criteria, to place these in voluntary codes and to enforce them without effecting its own collapse . . . ."

Mr. Terborough in writing Part VI, "The NRA as a Recovery Measure" has written the chapters that should prove most interesting reading to all who are interested in the conclusions of the investigation as a whole rather than the analysis of its several phases. He has done his work extremely well from the analysis of "NRA Purchasing Power Theory" to the analysis of actual results. As for the theory, it is found wanting on every count. As for results. "The rapid upsurge in this wholesale commodity index in the summer of 1933 may be attributed very largely . . . to . . . NRA." It also " . . . delayed the readjustments needed for a revival of the capital goods industries . . . ."

In addition, " . . . the price and cost changes attributable to the NRA were so distributed as to aggravate

the total burden of long-term debt." It is also made clear that "... the NRA has had the effect of restricting production below the levels it would otherwise have attained ...." And this significant statement must be included here, "The spreading of work accomplished by the ... codes gave part-time employment to less than a sixth of those unemployed at the time they became effective. The remaining 10 millions unemployed must look to an expansion of production" (p. 844). As for real income of employed workers it is brought out that "The resultant loss in average real income per employed worker was perhaps 5 or 6 per cent" and this loss provided "... the principal source from which the newly added workers obtained their real incomes."

Among his conclusions, for the study as a whole, is the belief that "The outcome of this experiment casts doubt on the feasibility of improving the aggregate real income of labor by a general increase in nominal wage rates." Another weighty observation refers to "This tendency to freeze the cost and price structure against downward adjustments ... one of the most potentially important long-run effects of the NRA" and anything "... which tends to freeze wages and prices ... against necessary adjustments makes more difficult ..." the attainment of economic equilibrium.

It need not be said that this treatment of NRA is final and comprehensive, but it is possible to say that it throws a penetrating light upon the greatest social experiment ever undertaken by a great country and the final appraisal must be that the first great effort of a major country to convert a depression into recovery by artificial means was a failure from the economic view, if not from all the other possible perspectives. The reasons for the failure are also made obvious and when full allowance is made for the fact that the people asked for the experiment, even without adequate opportunity for preparation, it cannot be said that they will be entitled to much commiseration when the bill must be paid. All teachers of economics should study this volume with care, no matter what their particular fields because (a) it is an outstanding example of careful research under trying conditions, (b) because it is impartial and scientific, (c) because it must remain for a long time the best treatment of the subject obtainable, and (d) because it bores deeply into the complicated structure produced by the evolution of banker-capitalism in America.

University of Virginia

E. A. Kincaid

American Bank Failures. C. D. Bremer. (New York: Columbia University Press, 1935. Number 412 in the Studies in History, Economics and Public Law. Pp. 144, $2.25.)

This statistical study of bank failures utilizes the data prepared by the Comptroller of the Currency and the various congressional hearings. The first chapter presents the events leading to the banking collapse and ending with the Banking Act of 1933; Chapters II and III, Bank Failures; Chapters IV and V, Liquidation of National State Bank and the last three chapters, the responsibility for bank failures; bank investments and deposits. The book contains a bibliography and an index and the condensation of much valuable statistical information makes it a handy reference. It does not, however, discuss at any length the more general causes of bank failures and liquidation which have operated throughout the world—nor does it relate the American failures and American legislation to the changes in the level of prices, in the national and international structure of production, and to the social problems created by these changes. The study is therefore restricted to a study of bank practices and bank statistics.

Walter A. Morton

University of Wisconsin

Cost Accounting. Russell S. Willcox. (Chicago: Business Publications Company, 1934. Pp. vi, 329.)

The author in his preface describes this book as being designed as a text for accounting students, with possible references by practicing accountants. The well-known teaching difficulties of this subject are recognized and an interesting effort is made to overcome these.

The general structure of the book may best be indicated first by saying that, of the 329 pages, 260 consist of text, 40 contain 40 problems, 12 pages are occupied with a practice set divided into 14 assignments, and indexes account for 5 pages more. Another statement of its general character is found in the grouping of the chapters. The 5 opening chapters deal with the general purposes of cost accounting, and the ideas with which it deals. Ten chapters handle the subjects of labor and material, including also closing the books and the preparation of statements. Some 6 chapters discuss various aspects of burden, including unused capacity, spoilage, salvage, and waste. There are 2 chapters on standard costs and 3 on distribution or selling costs. In addition, there are individual chapters on process costs and on joint costs. One question arising out of this arrangement is whether it is most helpful to the students to isolate standard costs as much as they appear to have been isolated here. One of the greatest difficulties of the teacher is to know how best to present this subject to students. It is not in fact a separate and distinct phase of cost accounting, but runs through the whole fabric of the subject, more marked in some places than in others, but nearly always present in greater or less degree. This being the case the teacher is constantly tempted to refer to it without giving it complete treatment at the time. This author has evidently felt that it is most effective to deal with it as a separate subject in one place. Adjacent to this subject is the content of Chapter XXI, entitled "Interpretation of Expense," which deals with the subject of budgeting.

In contrasting the problems of inventory under the periodic and perpetual inventory methods, the author, referring to physical inventories, dwells on the danger of pricing. (Pages 14 and 188.) It may be said that these difficulties are not wholly absent in the case of perpetual inventory methods, since a pricing policy for materials requisitioned for process must be adopted there also, as the author recognizes in other places.

On page 5 the statement is made that "the buyer sets the price" and the influence of costs in this process is

perhaps minimized more than is necessary. It is true that costs cannot be spoken of directly as setting the price, yet when it is stated that "the law of supply and demand operates to determine the selling price," it should be recognized that "supply" when fully interpreted means chiefly the elements of cost, and to this extent costs are one-half of the determining factors. Cost accountants are sometimes disposed to underestimate the influence of the figures they produce, when they cannot see a direct connection between costs and selling prices.

One of the things well worked out in this book is the idea of the flow of values through the plant, that the amounts expended must rest upon units of product and be transferred from operation to operation until they emerge either as cost of goods sold, as inventories, properly valued, or as losses by the way. This is one of the most difficult concepts to convey to students and yet a most important concept for them to have.

In addition to the usual illustrations and forms, there are a number of useful diagrams illustrating the movements and functions of cost records throughout the departments, and the relation of different records to each other. These diagrams will be very helpful in giving students a proper perspective and sense of relationship in the various parts of this complicated subject.

The question is discussed on page 175 as to the treatment of unused capacity costs which, it is suggested, "might be treated as a direct charge against surplus, the same as any other capital loss." We doubt if such charges will find general acceptance as capital losses. Are they not proper annual charges against income? It is true they are not a proper part of cost of goods sold, but that they should be cleared through the annual account there would seem to be little question. What the author has in mind may be completely abandoned plant which, therefore, has lost its value to a catastrophic degree. In such case, there would be a good deal to be said for writing it off against surplus, since this would imply that inadequate depreciation had been provided in earlier years.

T. H. Sanders

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Expenses and Profits of Limited Price Variety Chains in 1934. Stanley F. Teele. (Boston: Harvard University Bureau of Business Research, 1935. Pp. vi, and 46. $1.00.)

With this Bulletin on Expenses and Profits of Limited Price Variety Chains in 1934, the Harvard Bureau gives for the first time an almost complete picture of the operations of a group of chain stores, from prosperity, through the trough of the depression and into the recovery period of the Business Cycle. The Bureau published its first bulletin on Variety Chains for the year 1929; unfortunately no figures were collected in 1930, but the series was resumed with bulletins for 1931, 1932, 1933, and 1934. The present bulletin (1934) summarizes the results of the studies of all five years. Due to the fact that the variety chain business is highly concentrated, the figures collected in 1934 from 30 companies, represented somewhat more than 85 per cent of the aggregate sales volume of the trade as a whole.

The operating results for 16 identical firms from which the Bureau collected figures for all five years indicate that "the trade was in the midst of rapid expansion when the depression began, and was unable to check that expansion until nearly two years of the depression had passed." Aggregate sales for these chains increased in 1931 over 1929, but the increase came as a result of opening a large number of new stores; as a consequence average sales per store declined sharply. The year 1932 showed a further drop in sales per store, and a considerable decline in aggregate sales. A small increase in aggregate sales is recorded for 1933, and the 1934 sales aggregate was the largest ever recorded. Sales per store also increased in these two years but did not nearly reach the 1929 figures.

In addition to analysing the operating figures for these chains, extended comment is given to year-to-year trends, goal figures, and the influence of size of chain, location of stores and type of business on operating results. Particular interest for students of accounting will be found in the Harvard method summarizing operating results; for instance, interest, insurance and taxes on real estate are included in tenancy costs. Total expense is tabulated first, "before interest," and then "including interest." Interest at the rate of 6% on the net worth exclusive of real estate and good will is considered as an expense under the latter heading.

E. D. McGarry

The University of Buffalo

Cemetery Accounts. Walter Mucklow. (New York: American Institute Publishing Company, Inc., 1934, Pp. x, 208. $2.50.)

It is refreshing to read an accounting text which covers a new field—even though it be about cemeteries.

The particular accounting principles relative to recording costs of site, cost of construction and development, cost of individual lots and other points relating specificially to a cemetery are covered in one of the early chapters.

The classification of accounts into the accepted groups of assets, liabilities, proprietary interest, income, and expense is not followed in this text. The author merely divides the accounts into "Capital" and operating accounts, and accounts recommended are listed alphabetically under these two headings. It has been years since I have seen a classification listing Capital Stock before Cash, or one in which operating income accounts, operating expense accounts and investment, endowment and financial income and expense accounts are all mixed together. The illustrative trial balance on pages 75 and 76 shows this same confusion as given in the schedules of accounts. The form of the operating statement, pages 168–169, carries the same alphabetical arrangement of expense accounts as has already been criticized. However, in the annual statement of profit and loss, pages 189–182, the expenses are grouped under Maintenance, Selling Expenses, and General Expenses. The Capital Stock and Surplus

accounts are listed under "Liabilities" in the balance sheet.

The schedule presented is in itself confusing through listing the following accounts, the titles indicating that very similar data might be recorded under at least three of them:

"14. Investments (for perpetual or general care)
"20. Perpetual-care fund
"21. Perpetual-care fund reserve
"31. Trustee accounts
"32. Trust funds—perpetual care, general maintenance."

The author apparently overlooks the fact that many cemeteries are owned by municipalities for he uses several accounts which indicate private ownership. Among them are Capital Stock, Surplus, Commissions and Selling Expense.

The various forms and records which the author thinks are necessary for a cemetery association to maintain are listed and illustrated.

The author has the following to say about numbering ledger accounts:

"To facilitate reference and distributing, it is convenient to number all accounts in the ledger, but this numbering should not be consecutive. It is convenient to use only odd numbers, leaving the even numbers blank for additional accounts which may be required."

I doubt whether there is any support among accounting instructors for such a system of symbols.

The treatment of time sales is explained in detail and rulings of a suggested sales journal, "sales ledger" and commission record are given. In discussing Commissions and Discounts the author uses but two accounts for recording Commissions—Commissions (an operating expense account) and Contingent Commissions (a contingent liability account). What about showing Commissions Earned and Commissions Payable as separate accounts?

The accounting for perpetual care sales—calculation of amounts, records, federal income tax problems—is well explained. The reader will find valuable references to both income tax regulations and court decisions.

No mention is made of the use of accounting for sinking funds for the redemption of bonds which may have been issued. In these cases the investments in such a fund should of course be separated from other investments.

The accountant—practitioner or instructor—will find the book a valuable reference on the subject even though a great many points are not presented in the finished form one would expect to find in 1935.

F. H. Elwell

University of Wisconsin

Federal Income Tax Handbook, 1935–1936. Robert H. Montgomery. (New York: The Ronald Press Company, 1935. Pp. xix, 1034. $10.00.)

The following excerpts from the preface of the latest edition of the "Federal Income Tax Handbook" are not only significant but seriously so:

When a subservient Congress obeys its dictator and passes laws which break a solemn contract to pay obligations in gold; . . . , it is hardly to be wondered at that it would bend to the lash and amend the income tax law to punish the thrifty, soak the rich, and make other departures from sound and wise taxation.

Our federal income tax law is grossly unfair; it violates the fundamentals of scientific taxation . . . ; it is harshly administered.

The Commissioner does exercise the discretionary power conferred upon him by the law—but only in favor of the Treasury.

These statements, coming from a man closely connected with the tax legislation and tax practice since the beginning of the present era, constitute a serious indictment of our present tax laws and their administration. In this case the criticism can hardly be dismissed by the cynical "wise-crack," "Who's Mr. Montgomery?"

The latest edition of the Federal Income Tax Handbook is similar in arrangement and treatment to its predecessors. The various sections of the current law are considered in logical sequence, and are explained and interpreted in a clear and authoritative manner. The variations of type used in the quotations of law, regulations, decisions, explanation, and comment enable a reader to keep his bearings without too much conscious effort. The quotations of law and regulation are right to the point, and all material not necessary for the point in question is omitted.

The book is divided into twenty-seven chapters covering the entire income tax field, as well as that of sundry other taxes. The text material of the book is preceded by a table of law sections which gives the section of the law and the page reference of each section. These law references cover not only the 1935 and 1934 acts, but go back to the 1918 act. Each chapter is preceded by a table of contents sufficiently detailed to serve its purpose. These are eight hundred and ninety-one pages of text material in this book.

After the text material of the book there are the following indexes:

Index to Articles of Regulations for all laws
Index to Treasury Department Rulings
Index to U. S. Board of Tax Appeals Decisions
Index to Court Cases
General Index.

The author and his associates seem to have done everything possible to make this book a "handy tool" for taxpayers and tax practitioners. An authoritative answer to almost any question involving taxes may be found with the minimum of effort and with the maximum saving of time. On matters which have not been finally adjudicated the author does not hesitate to give his opinion as to the probable finding. These opinions should be of much assistance in making returns under the new laws, many provisions of which are new, and in some respects radically different.

Taxpayers, lawyers, accountants, and tax practitioners should find the latest addition to the Income Tax Handbook family an aid in preparing returns which will reduce to a minimum refund claims, which are to-

day not only futile, but are absolutely dangerous. In regard to refund claims the author says in his preface: "At one time a claim for refund was received and treated by the Bureau with some respect. Today refunds are not even handled with honesty. Instead of passing on claims for refund impartially, the entire Bureau endeavors to find ways and means of disallowing the claim."

James V. Toner

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Office Management. George M. Darlington. (New York: The Ronald Press, 1935. Pp. x, 203. $2.00.)

Professor Darlington has given us an excellent treatise on office management. He aptly summarizes the purpose of his book by stating in the preface that it is not the function of such work to serve as an encyclopedia of detailed information, but rather as a tool to be used in opening the mind.

The first two chapters treat the functions and duties of the office and its manager. The office serves as an "interfunctional clearing house" for the various departments of the going concern. It is the directing brain, not only for the functions within the organization, but also with outside contacts. The full responsibility of the office is on the manager. It is his duty to get the work done accurately, promptly, and cheaply. He must supervise and train its employees, and prescribe and enforce standards of operation.

Management of a business consists of two interdependent functions—judgment formation, and the devising proper machinery for its execution. The first is distinctly a psychological process, and it depends upon the clearness with which the problem is formulated, and the correctness of its analysis and the faithfulness of its execution. The second step depends upon a technique which is developed for the accomplishment of these ends. Probably the most exacting problem is to be able to control certain variables and errors that are always likely to arise.

The tool of office management is organization—without which little or nothing is accomplished. Wastes and excessive over-head expenses may be avoided or greatly mitigated by a well directed organization. The particular form of the organization is of little importance, especially as long as it serves the particular purpose.

Much is said, both in and out of business circles, about standardization. Any office may be over- or under-standardized, both as to personnel and equipment. Standardization usually implies reducing the work to a more or less routine. Such procedure may yield greater efficiency at a certain level, but it may play havoc with the morale and initiative of the office force. Office manuals and charts have important functions to perform in the administration of any office. It is highly important that routine should not displace the motive for improvements, and the testing of new methods and processes. The various tasks of the office must constantly be subjected to job analysis, and the efficiency of the work must be continually checked.

The welfare of the office worker must be constantly kept in mind. It should never be forgotten that the efficient, low cost worker is the one who is happy in his job; who is situated in attractive and comfortable surroundings, and who has the proper supplies and equipment with which to work. Proper room temperature, lighting, and individual desks and places to work, are highly important.

The office manager must know, at all times, just what work is being done. He must also know who is doing it, and how well the job is being accomplished. This may be done in various ways. First, by direct supervision by the office manager himself. But if the office happens to be a very large one, then he will have to accomplish this objective by means of assistants and reports. It is here that difficulty may arise, because competent assistants may not be chosen, and the reports may be so badly written as not to convey the proper thought to the workers. Too many reports, or those that are not clear in context, are almost as bad as none at all.

There are so many ways of supplying incentives to a group of workers that it is difficult to state in a few words more than their fundamental objectives. As a rule, only positive incentives, such as promotions, material rewards, and vacations, should be used. Self-respect, the urge of achievement, and the desire for accomplishment are tools which may be used very effectively.

The flow of work through an office is more or less variable. It is not only subject to interruptions, but the volume may vary from time to time. Peaks occur almost daily, weekly, monthly, and even yearly. It requires foresight in the planning to be able to meet these periods, and not find the business hampered by a glut in the office.

Probably one of the most important, yet one of the most difficult problems to handle, is the work of the credit and collections. Good customers may be offended by an improper handling of their accounts, while the firm may suffer heavy losses by being too lenient with the fellow who does not intend to pay. It is in this connection that keen judgment is required. A competent office manager is therefore a great asset to his firm.

Professor Darlington has fully treated every phase of the office problems and technique, and his book is recommended, not only to the general reader, but also to the teacher and student of business organization and management. His book is both readable and teachable, and is accurate and scientific in its treatment.

Orval Bennett

Washington University

Changes in the Financial Structure of Unsuccessful Industrial Corporations. Raymond F. Smith and Arthur H. Winakor. (Urbana: University of Illinois Bureau of Business Research, 1935. Pp. 44.)

The bulletin, Changes in the Financial Structure of Unsuccessful Industrial Corporations, presents the results of analyses of 181 companies which failed from 1925 to 1931, both inclusive. One of the companies whose reports were analyzed failed in 1923 and one in 1924. There are, therefore, analyses of the reports (balance sheets, income statements) of 183 corporations

used in the study. Comparisons of these companies were made according to their size and for four specific lines of industry.

Chapters titles are as follows:

I. Introduction
II. Current Position
III. Composition of Assets, Liabilities, and Net Worth
IV. Revenue and Other Relationships
V. Summary

The Appendix contains seven tables of unusual value to the instructor of a class in Analysis of Financial Statements. The entire pamphlet is decidedly worthwhile and is an excellent illustration of the valuable material which is being made available through well organized Bureaus of Business Research.

F. H. Elwell

University of Wisconsin

Problems in Auditing, Second Edition. Arthur W. Hanson. (New York: McGraw-Hill Book Company, Inc., 1935. Pp. xvii, 556. $5.00.)

The teaching of Auditing in our American Universities has been the subject of much debate and this debate reveals wide variation between individuals as regards the procedure of presenting the subject to students. Moreover, as evidenced by the books written and used in the various schools, the literature on Auditing offers many possibilities in the way of handling the course. It shows that we have gone a long way from the day when Dicksie's Auditing was predominant. Today we have books dealing with auditing principles, auditing practice and procedure, auditing technique, auditing sets, auditing working papers, auditing reports and auditing problems making it possible to teach the course in almost any way desired.

The book to be reviewed is classed with books on the problems of auditing. And yet it must not be thought that it contains auditing problems of the common variety. The latter are of a highly technical nature, requiring for their solution not alone the application of auditing principles, but mathematical calculations and the use of very definite accounting procedure such as working paper preparation, journal entries, statement construction, etc. The problems in this book, rather, are for the most part capable of oral discussion and do not require technical solution. They presuppose even more careful thinking, however, and in many aspects are concerned with more important considerations. Although definitely dealing with the application of auditing principles, they are nevertheless highly practical. They present the subject largely from the angle of the senior and supervising accountant and very little from that of the junior accountant.

The second edition before us follows in general the edition of 1930. However, of the 126 problems of the former edition, 48 have been discarded and 71 have been added. The section on Reports to Stockholders and Part IV on Balance Sheet Problems have been omitted. The order of arrangement continues as before. First come problems dealing with the purposes of auditing, auditors' responsibilities and beginning an audit. Then chapters respectively on auditing Cash, Securities, Receivables, Inventories, Plant, Other Assets, Liabilities and Capital Stock, and Surplus and Reserves. In Part III are found complete working papers for one audit together with the report.

The reviewer is impressed with the care that has been taken to gather representative and important factual material, and problems which permit of excellent class discussion, a phase of the subject which has been very much neglected. When used with other books it offers to students an opportunity to obtain a splendid insight into the salient accounting situations. It is a valuable addition to accounting literature.

W. S. Krebs

Washington University, St. Louis

Federal Taxes on Estates, Trusts and Gifts. Robert H. Montgomery and Roswell Magill. (New York: The Ronald Press Company, 1935, Pp. x, 458. $5.00.)

The authors of "Federal Taxes on Estates, Trusts, and Gifts" very wisely included in this volume the income tax on estates and trusts as well as the tax on estates and gifts. The problems under these three forms of taxation are interrelated, and are best understood by a joint discussion.

This book consists of three parts and appendices. Part one deals with the income tax on estates and trusts, and is subdivided into four chapters. This section of the book contains a complete treatment of the method of taxing estates or trusts, income tax on fiduciaries, and deductions of the estate or trust.

The second section of the book, consisting of six chapters, deals with the estate tax. The subdivisions of this section are:—history and rate structure, gross estates of residents or citizens and of non-resident aliens, the valuation of items of the gross estate, deductions from gross estates, and the administration of the estate tax.

The third section relates to the returns, computation, and administration of the gift tax.

This book follows the same plan as the Federal Income Tax Handbook. The law and regulations are quoted and interpreted; rulings and decisions are summarized and cited; advice, suggestions, and opinions are given in connection with procedure. The typography of the book makes it easy to distinguish quotations of law, regulations, decisions, and the authors' opinions.

Not only are the ordinary tax problems arising in estate and trust work discussed, but the unusual and more complicated problems are stated and solved. Unfortunately, in certain parts of the book the authors forget that many taxpayers and accountants are not lawyers, and are not, therefore, qualified to get the full significance of terms which are strictly legal. A glossary for the definition of these terms would be quite helpful.

While it would not be possible in any limited review of this book to comment on any considerable portion of the contents, yet I feel that the treatment of insurance by the authors deserves, because of its wide application, some emphasis. The authors give a complete, concise, and understandable summary of the principal problems arising in connection with insurance from the

viewpoint of estate and inheritance taxes. It should leave all readers the urge to examine their insurance policies to determine the extent to which they are subject to estate and inheritance taxes.

The authors of "Federal Taxes on Estates, Trusts, and Gifts" are to be commended for dignifying this part of our tax laws by a separate volume, for the completeness of the treatment, and for the selection of the points to be emphasized. Their book should be of immense assistance to fiduciaries, attorneys, accountants, and tax practitioners.

JAMES V. TONER

Boston University College of Business Administration

State Bank Failures in Michigan. Robert G. Rodkey. (Ann Arbor: University of Michigan Bureau of Business Research, 1935, Pp. 169. $1.00.)

In this study the University of Michigan has made an important contribution to our knowledge of the underlying causes of recent bank failures. It is a statistical analysis of 163 cases of failure occurring between Jan. 1, 1930 and Feb. 11, 1933. The sample included one small Detroit institution and all state banks outside the city which failed during the period.

The findings may be summarized as follows:

1. Capital funds in relation to deposits were reasonably adequate.
2. Excessive investment in bank building and other real estate was characteristic.
3. Liquidity ratios were very low.
4. Investments in real estate mortgages were heavy.
5. Bond portfolios were not particularly excessive, but were badly selected. U. S. Governments and Rails were notably absent, while real estate and construction bonds were found in very large quantities.
6. The earning power of the banks was not deficient, but the large "charge-offs" and "write-downs" indicated great incompetence of management.

The method used was to study the condition of the banks in 1929 and then to consider their status at the time of failure, making comparison with the solvent Michigan State banks, all national banks, and all country national banks. Separate chapters are devoted to failures in relation to size and location of bank, proportion of invested capital to total deposits, liquidity, real estate mortgages, diversification, and earning power. It is not possible within the limits of this review to summarize the statistical evidence; but it may be said that the findings should be of great help to those who are concerned with the problem of bank management in Michigan. Questions relating to liquidity and diversification are treated in an especially able manner.

The author concludes with a chapter on remedies. Branch banking, elimination of dual control, a licensing system for bankers, and greatly increased severity of examination are among the solutions offered. But perhaps the great value of the study is to be found in the statistical demonstration of why the banks failed. Similar studies should be made for other parts of the United States.

J. RAY CABLE

Washington University

The Mathematical Theory of Finance. Kenneth P. Williams. (New York: The Macmillan Company, 1935, Pp. xii, 280. $2.75.)

The subject of the mathematics of finance is one which deservedly has received an increasing amount of attention in the last few years. Throughout the realm of business, we are constantly confronted with problems of interest, discount, mark-ups, income distributions, bond valuations, etc., and schools of business would be remiss in their duty if they failed to prepare their students in a subject that has become one of major importance. The question then is as to what particular topics are to be covered in a course of this kind. Professor Williams' book devotes one chapter to simple interest, one to compound interest, one to equation of payment; there are two chapters on annuities, followed by individual chapters on the application of annuity theory to problems of sinking funds and amortization, bond valuation, and that perpetually vexing problem of depreciation. Further applications to the field of life annuities and life insurance complete the main body of the book. The appendix contains expositions of the binomial theorem, arithmetic and geometric series, and logarithms. An unusually complete set of tables is also furnished.

It will be seen then that beginning with chapter II, and with but few minor exceptions, the entire field covered is that of compound interest and its many ramifications. Now it seems to the present reviewer, that there is a considerable, unexploited field of simple interest and even of outright percentage problems which are of sufficient importance to warrant their inclusion in a general treatise of business finance and mathematics.

The author is to be commended for the simplicity of his introduction of compound interest, and for his insistence that the converse cases do not need special formulas but can be solved by reference to ordinary algebraic transformations.

In connection with compound interest where fractional parts of a conversion period are involved, the author offers as alternative solutions first the strict application of the compound interest formula, and secondly the use of the formula for the integral number of periods plus simple interest for the fractional period. There is no doubt as to the logical correctness of the first method, particularly in scientific work where calculations on the law of organic growth are involved; yet it might have been well to point out that in business, the second method has been generally followed.

In chapter III illustrations are given of equated payments, but only for cases involving compound interest. Simple interest cases have been omitted; however they are important since the latter condition arises frequently in connection with accounts current.

The first chapter on annuities is very compact. Solutions for the converse cases involving "n" and "i" are given only by means of interpolation in existing annuity tables. The algebraic method for solving for "n" is presented as a problem to be solved by the student. But the general method of solving for "i" by the use of an approximation formula derived from a binomial expansion is merely hinted at without being solved.

In chapter V special annuity formulas are developed

for cases where interest conversions and annuity payments do not coincide. Professor Williams has succeeded in transforming the usual formula used for this purpose into a simple form, reducing the amount of work required in solving and also making possible the use of regular annuity tables.

The chapters on sinking funds, amortization, and bond valuations cover the necessary ground logically and with a minimum of effort.

A word needs to be said concerning the chapter on depreciation. It is no fault of Professor Williams' if he has gone astray as to the nature of the sinking-fund method of depreciation, since many accountants themselves do not fully comprehend it. Specifically, a replacement fund is no necessary accompaniment under this system, any more than it is under the straight-line method, or any other method. All that the sinking-fund method of depreciation amounts to is the use of a sinking-fund formula for calculating the credits to the reserve account *as if a fund were actually contemplated.* But most discussions seem to emphasize the replacement fund as an inevitable concomitant of this method.

A number of methods of depreciation are not mentioned; among them is the composite-life method, and also what is usually referred to as the annuity method, and which really is one based on the present-value or amortization formula. The latter method is not very popular, since it involves the inclusion of an interest charge on the investment (the remaining book value).

With the increasing interest shown by laymen and students in our business schools in questions of life annuities and life insurance, it is well to have the basic principles presented in as simple a manner as possible, and this Professor Williams has done. The subject is certainly not easy; perhaps a discussion of the subject of permutations, combinations, and probability might have been introduced into the text, as a preliminary to discussing life annuities and insurance, but that is debatable.

Throughout the book, the problems and exercises have been selected with care and intelligence. The introduction of the American Annuitants' Table of Mortality is a welcome departure from the usual textbooks which use the American Experience Table for both insurance and annuity calculations.

Perhaps a more critical appraisal of some of the methods and practices explained in the book might have been desirable, but from a mathematical viewpoint, the work is unimpeachable.

THEODORE LANG

New York University

Money and the Economic System. E. M. Bernstein. (Chapel Hill: The University of North Carolina Press. 1935. Pp. xi, 516. $3.00.)

Mr. Bernstein explains, in the Preface of this volume, that "The principles of money formulated by the older economists are still an important part of our knowledge; but on these principles there has been erected a new superstructure, clarifying, amplifying and extending our new understanding of money. Unfortunately, the importance of the newer principles has not yet been recognized by many of our statesmen...." Moreover, "For many years the gold standard was an end in itself; and the economic system, for better or worse, had to adapt itself to the limitations placed upon it by an antiquated monetary standard." It seems to follow that the "new superstructure" does not include the gold standard and that, indeed, is the case, for "The experience of recent years in the United States, in Great Britain and in Sweden is evidence that monetary management is a practicable policy." Moreover, it is considered adequate for the solution of "... our most pressing economic problem—periodic unemployment ..." since that problem "... is largely of monetary origin and is subject to monetary control ...."

This brief statement roughly indicates the monetary philosophy with which the author approaches his work. As for the latter, it is presented in five parts and the first of these develops "The Monetary System" in five chapters. After defining Money "... as anything that is used as the economic unit of measurement, and that is generally accepted in payment for goods and services, and in discharge of economic obligations." Mr. Bernstein examines the "Modern Forms of Money" and concludes that "Deposit money ... is the only important form of bank money in this country ...." Passing to "Gold and Other Monetary Standards," the author finds that "... there is no reason to believe that a monetary system managed to maintain the value of a unit of money equal to the value of a given quantity of gold would be better than a monetary system managed to maintain economic equilibrium." Thus is the gold standard dismissed as a means of maintaining economic equilibrium, (p. 60) for a country "... must choose between linking the value of money to gold and keeping its economic system in equilibrium." Indeed, there is not much choice, for "... even ordinary management would undoubtedly be superior to the automatic variations in the supply of money that result from regulating it with reference to gold reserves." (p. 89)

In Chapter V, "The Monetary System of the United States," there is a brief treatment of monetary management since 1933 in the course of which Mr. Bernstein asserts that, "The policy of depreciating the foreign exchange value of the dollar, of which the gold and silver purchases are a part, undoubtedly aided in the rise in the price level after March, 1933," but there are no supporting data. Again, (p. 116–7) it is said that "... the monetary changes since 1933 have been the necessary and desirable means of establishing a monetary system managed for the purpose of maintaining the proper production, distribution and utilization of the national income." This statement also is unsupported except by the deductive analysis which is subsequently developed in support of monetary management as a means of attaining economic equilibrium and this by no means sustains the adequacy of the changes that have been made.

Part Two, relating to "Prices" presents an unusually good chapter on "Index Numbers of Prices" and the clearest statement concerning "Price Movement" available in text book form. Here it is said that "... the rise and fall of prices during the various phases of a business

cycle are not related to variations in the available supply of monetary gold" (p. 164) Again, (p. 171) it is pointed out that "... the supply of monetary gold and the volume of production are not the only factors affecting normal prices." Evidently the monetary gold stock is one of the factors affecting normal prices alone. With these two chapters concerning elementary principles, it is possible to develop Part Three, "The Value of Money." Here, again, the book excells in that it provides brief but clear statements of the essentials of the cost of production theory, the bullionist theory, the supply and demand theory before taking up the quantity theories. Fisher's analysis of the quantity theory is first taken up and it is pointed out that "... so long as instability is characteristic of prices, an assumption that the velocity of money is independent of the price level invalidates any conclusion regarding the forces determining the value of money." Mr. Bernstein concludes that "The average level of prices that is determined by the equation of exchange is probably a good measure of the price level of the transactions involved. But it cannot be considered a measure of the value of money in purchasing goods and services for consumption." (p. 211)

Analysis of quantity theories then passes to "Cash Balances and the Price Level." Here, also, it is concluded that "... the cash balances equations do not measure the value of money in purchasing goods and services for final use ...." Indeed, Mr. Bernstein is rather disposed to agree that "... the two types of equation are different views of the same phenomenon ...," the transaction value of money. It is not too much to say that the author has the best one-chapter exposition of the cash balances approach in text book form. Also, his discussion of the value of money is amplified and strengthened by his chapter, "Income and Expenditure, and the Price Level," Chapter XI, where he takes up the views of Aftalion, P. W. Martin, Hawtrey and Keynes with respect to the relations of money, income real income and the price level. The theories of Hawtrey and Keynes are found to be quite similar, "... despite the different emphasis on causes of price changes" and "There is little of fundamental importance in Hawtrey's analysis that can be disputed." (p. 265)

The value of the treatise is still further enhanced by Chapter XII, "The Discount Rate and the Price Level," wherein the theories of Wicksell and Cassell are presented, and the conclusion reached that "... there is *a* causal relationship between the discount rate and prices ...." However, "... it is incorrect to say that *the* cause of higher or lower prices is solely in the movement of the discount rate" for the real rates of remuneration of the factors of production determine the rate at which credit is created and repaid. (p. 290) In passing, Mr. Bernstein remarks that the chief source of error in the theory of Warren and Pearson "... is the neglect of the income velocity of money."

Part Four, "Monetary Problems," begins with a discussion of inflation and deflation and their essential feature is found in the existence of business profits or losses. Since a moderately severe inflation or deflation cannot be expected to remedy itself by an appropriate movement in the expense level (p. 313), devaluation may become necessary, but complete dissociation of the dollar from a fixed weight of gold would be even better. The treatment of the relationship of commercial banks and prices (p. 339) brings out the point that "The banking system induces changes in the price level by the rate at which it expands or contracts loan-deposits" and then passes to "The Central Bank and the Price Level" and its power to control the reserves of member banks in relation to loan-deposits. There is an excellent chapter (XVI) on "Business Cycles" which is devoted chiefly to monetary theory of business cycles, including Hawtrey's and Keynes' and the author is so optimistic as to conclude that "Only a national monetary authority with sufficient control over the creation of credit and investment can manage the monetary system to avoid variations in business activity." (p. 388)

Part Five, "Monetary Management," starts off with the assertion that the gold standard did not contribute to the industrial progress while that standard prevailed. The period was characterized by business cycles to which disturbances inherent in the monetary system contributed to a large extent. Monetary management could offset monetary disturbances and materially lessen the non-monetary. Just how much could be achieved through management is not made clear, for it is admitted that "... even a perfect monetary system cannot solve all the economic problems of the community ...." But, "... a good monetary system can do much to minimize these difficulties ..." and the author firmly believes that a managed monetary system would or could be good. It is this faith in management that detracts from and weakens his treatise. Indeed, but for his advocacy of management, it would be possible to say that he has written the best *text* on money yet to come from an American economist. A good text does not advocate any particular theory of money, but analyzes all impartially. The theory back of his case for management is to be found in his contention that "If industrial equilibrium is to be maintained, it is essential that the rigidity in the price structure should be offset by flexibility in the price level." Admittedly, the presence of rigidity is an appalling fact, but is it to be met by an appalling remedy, bureaucratic control of credit. Moreover, the author commits himself to one of the chief arguments of the nationalists, for "A well-managed monetary system must be national, not international." There is at the close of the book a valuable section, "Suggestions for Reading" with brief concise comments on the books mentioned and a helpful "Glossary."

E. A. KINCAID

University of Virginia

Money and Banking. Second Edition. Frederick A. Bradford. (New York: Longmans, Green & Co., 1935, Pp. xii, 814. $3.75.)

This volume is a combination in one volume of "Money" and "Banking" by the same author. The process of combination involved a complete reorganization and the inclusion of new material. The consolida-

tion was made with the hope that it would enhance the usefulness of the book and it appears that this hope has been realized. The first four chapters devoted to fundamental concepts and historical development of money, including a chapter entitled "Monetary Developments Since 1932," were originally published as a pamphlet. The next six chapters deal with the nature and functions of commercial banks, thereby permitting the analysis of deposit currency. Two excellent chapters on foreign exchange are followed by a chapter on "Central Banks" in which there is a brief treatment of the Bank of Canada.

"Early American Banking" is followed by two chapters on the national banking system and then the discussion passes to the Federal Reserve. The vital changes wrought in the Federal reserve system beginning with the Act of September 7, 1916, when advances to member banks on paper secured by federal obligations were first authorized, strangely enough receive no special comment from the author. Neither does he seem disturbed by the Act of 1933, which permitted federal securities to be used as collateral for federal reserve notes, thereby permitting Federal obligations to penetrate still further into the system. The five chapters on the Federal reserve system conclude with the charitable observation that ". . . intent of the framers of the Federal Reserve Act to provide for an elastic currency based on the commercial and agricultural needs of the country has been satisfactorily attained . . . ."

The excellent chapter on "Crisis and Reform Legislation," fails, as do most similar discussions, to explain why the alarm spread to Germany, after the Credit Anstalt failed. Dr. Bradford questions the wisdom of the deposit insurance feature of the Banking Act of 1933, and he is disposed to feel that state wide branch banking should have been permitted for national banks, regardless of state laws. Everything considered, it would seem that the Act of 1933 must be considered a failure as a reform measure. Chapter XXIII, "The New Banking Philosophy—The Banking Act of 1935," is not found more satisfactory. The Administration's attitude toward banks is criticized, but the part the banks played in bringing on their own difficulties is not at the same time clearly brought out. The final appraisal of the act, that it ". . . represents the outcome of a long struggle on the part of the Administration to centralize control of credit in the Federal reserve system under political control," does not make any reference as to where control has resided hitherto and where it will reside in the absence of Federal control. Nor is there any recognition of the absolute necessity of a system in which the people have complete confidence because they know where the control lies.

Dr. Bradford's treatment of the value of money is one of the outstanding merits of his book, for he has presented an excellent clarification of the "cash-spending" and the "cash-value" approaches to the problem. The conclusion is reached that ". . . income velocity is more important than transaction velocity in determining causes of changes in the value of money." The discussion of theory is enhanced by the chapters, "Bank Credit Money and the Value of the Standard" and "Government Credit Money and the Value of the Standard" because both deal with problems of great practical significance in recent history and the student cannot become too well grounded with respect to them. The chapter on International Exchange analyzes the artificial control of gold movements and devaluation with respect to gold movements, both deserving of the brief but careful consideration given them. In discussing "Central Bank Reserves," the conclusion is reached that uniform reserves are unnecessary and undesirable.

In connection with a discussion of "Central Bank Co-operation," Dr. Bradford gives some space to the Bank of International Settlements and then resumes on monetary policy, this time in connection with the "typical pre-war business cycle" and "post-war cycles." For the latter he relies somewhat upon Col. Ayres[1] and the result is a materially improved treatment. "Credit Control Under the Federal Reserve System," Chapter XXXII, brings out the stated policy of the Board, announced in 1923, and the departure therefrom in 1924 and more decidedly in 1927. Dr. Bradford is not severe in his criticism of the Board, though he characterizes it as having been "too opportunistic." The Glass-Steagall Act seems to meet with his approval and so also does the easy money policy resumed in 1931 and continued in 1932. The policy pursued after the banking crisis of 1933 seems not to meet his approval and he finds in the attitude of the Board in 1935 a tendency away from qualitative toward quantitative control of credit, but there is no reference to the possible influence of ideas such as those held by Mr. Lauchlin Currie.[2]

The entire subject is elaborated in Chapter XXXIII, "Future Possibilities of Credit Control," in which it is made clear that ". . . complete elimination of cyclical movements in business is not to be expected," but there is some probability of success provided the banking laws are materially altered. The chapter, "The Problem of the Standard" is devoted in part to the refutation of Governor Eccles' hope that the reserve authorities will be able, ". . . not only to prevent an excessive expansion of bank credit, but also to prevent a subsequent reaction . . . ." The pre-war gold standard is insufficiently analyzed, but there is a good statement of the obstacles to the play of reciprocal forces after the war. In view of these factors, Dr. Bradford is disposed to favor elimination of the obstacles to a resumption of that standard.

There follow chapters on "Trust Functions," "Investment Banking," "Savings Banking," and "Agricultural Credit" which give some consideration to the repercussions of the post-war period, though it should be said that the last named chapter is not sufficiently critical with respect to the credit policies pursued. It is fortunate that a chapter entitled, "The Bank Statement" is included, for this is a subject which is vital, if students are really to have anything more than a theoretical idea of banking. Dr. Bradford is the only author of a text on money and banking, so far as the reviewer is aware, who takes up the subject of bank liquidity in

[1] *The Chief Cause of This and Other Depressions.*
[2] *The Supply and Control of Money in the United States.*

a satisfactory even if a brief way. The work is concluded with a chapter on "Bank Earnings and Expenses" which considers the cost of carrying an account for a depositor and its inclusion is justified if for no other reason than because college students should read it.

There are a number of minor defects, including a lack of emphasis on certain vital points, which need not be referred to here for taken as a whole it is safe to say that Dr. Bradford has written the best text on money and banking now available. It is well-balanced with respect to the historical and current phases of the subject and also with reference to theoretical and practical problems. Moreover, the work is evenly developed and the treatment uniformly strong. The monetary aspects of the subject are well woven into the treatment of banking so that in effect the text is a treatment of money, as it should be. The effects of the events since the beginning of the World War are given the prominent place they deserve without sacrificing the historical background of money and banking as it has evolved in this country. The mistakes of recent years are clearly brought out, and for the most part in a spirit of fairness.

E. A. KINCAID

University of Virginia

British International Gold Movements and Banking Policy, 1881–1913. W. Edwards Beach. (Cambridge: Harvard University Press, 1935. Pp. xiv, 218. $2.50.)

"Cyclical movements of gold coin from New York to the interior . . . , accompanied by imports of gold from abroad during periods of business prosperity, were encountered in the United States during the pre-war era. In depression both flows were reversed. The importance of these phenomena for problems of money and banking and international trade was pointed out by the late Professor Allyn A. Young. At his suggestion, the present study was begun to see whether the same relations between internal and external movements of gold were to be found for England." The nature of the project is thus clearly set forth by the author in his "Preface" to this volume, No. 48, in the Harvard Economic Studies.

In the "Introduction," the author again points out that, "Professor Young found that during periods of prosperity gold tended to come into the United States in response to high discount rates, even though a relatively high price level should have caused gold to be exported." This phenomenon raised the question of the relative importance of discount rates, as compared to commodity prices in bringing about the movement of specie, so far as cyclical fluctuations are concerned, and "the present study attempts to evaluate the quantitative problems involved." Remarks of the author in his "Preface," indicate the problem as one having to do with economic friction, affecting the degree of automaticity of the pre-war gold standard.

"The Theory of International Gold Movements" is then presented with reference to (a) the classical theory of trade adjustment, (b) the classical bi-lateral theory of gold movements and (c) the neo-classical theory of Taussig. The analysis of the latter aspect leads Dr. Beach first to present Hawtrey's general theory of money and credit and then his view that drains of gold abroad and synchronous drains to the interior are the phenomena to be expected during the expansion phase of the cycle. He concludes that Hawtrey's analysis of the mechanism of exchange " . . . is inherently classical," because it " . . . depends upon the prompt reaction of commodity prices to changes in the volume of deposits and currency. The size of the unspent margin must be sensitive to variations in rates of discount . . . ." The deficiencies of this view are then brought out, i.e., the elements of friction are revealed and the discussions pass to "Writers on foreign exchange . . . ," including Goschen, Taussig, Whitaker, Young, Laughlin and Angell, thereby bringing out refinements of the classical theory worked out by these writers or by himself in the course of his analysis of their work. Dr. Beach also considers the views of "The chief proponents of the Currency Principle . . . " and agrees that " . . . there did not exist the intimate connection between gold and prices which was presumed . . . " by this school.

Chapter III is devoted to "Gold and Currency Movements" and it is brought out that the Bank of England at the beginning of the period (1881), " . . . following the oft-times repeated criticism of Bagehot and others, had begun to operate in a systematic and well-defined manner," with a view to control of the money market. It is in this chapter that the author begins to set forth the extent of his own careful investigations of various series bearing upon gold and currency movements, particularly with respect to the extent of their cyclical character. He finds that " . . . the data seem to warrant the conclusion that in cases where the period of expansion was long-continued and the succeeding recession gradual, the internal drain was abated slowly. And where the business cycle was shorter and the recession abrupt the drain ceased more quickly."

"Bank Reserves and Credit" is the subject of Chapter IV and the statistical data there presented are amplified by the historical material presented in Chapter V, "The London Money Market, 1881–1891." "The two types of information are then considered with relation to the theory of international gold flows." Chapter VI, "The London Money Market During the Depression of the Nineties" continues the survey of the conditions in the money market from the Baring Crisis to the Boer War. The following chapter examines the problems encountered by the Bank of England from the Boer War to 1913. One may refer to only a few of the significant findings of Dr. Beach in these chapters, but attention should be called to the fact that the Bank rate went to 7 per cent during the American panic of 1907 with the result that " . . . the next export of gold for the fourth quarter of 1907 amounted to less than one million pounds and a net gain accrued . . . in the first three quarters of the year. This achievement was heralded as the acme of success of the English banking system under the act of 1844." But Dr. Beach attributes the results obtained to the fact that ". . . the two continental banks (Bank of France and the Reichsbank) preferred to aid the Bank of England rather than suffer high discount rates in their own countries." And again in 1910, ". . . the Bank of France was willing to let gold go temporarily to avoid any disturbance in the French mar-

ket . . ." and to some extent the Bank of France became ". . . the central bank for England as well as France, and were permitting the use of their bullion stock because the English system was not competent or willing to take care of seasonal and other needs." As for another deficiency in the London money market, Dr. Beach points out that it is ". . . apparent in times of distress, at least, they (the joint stock banks) were more willing to co-operate with the Bank of England in bringing the money market under control than they had been earlier."

"Relations of the Bank of England to the Money Market and The Banking System" is the subject of Chapter VIII. There it is pointed out that in the middle of the nineteenth century the Bank of England was the leader in the money market ". . . because it always supplied a portion of the supply of funds seeking investment." After 1857, the Bank altered its policy with respect to rediscounts because of the growth of London joint stock banks, the increase of available loans from private banks and discount houses, the lessons learned in the crises of 1847, 1857 and 1866, and the ". . . repeated strictures of Bagehot on the necessity of keeping adequate reserves for any emergency." By 1878, the Bank had definitely accepted the new situation and announced ". . . that it would no longer lend to brokers at the market rate, but would restrict discounts at that rate to its regular customers only . . . ." By 1881, the Bank had learned to alter its discount rate in a systematic manner in order to control gold flows; and the state of the reserve was the criterion upon which discount policy was based." But, the lack of power over the market compelled the Bank to resort to other means than the discount rate to obtain the necessary control. There follows a discussion of open market operations relative to the discount rate.

The final chapter, "Gold Movements and Banking Policy" is the most vital, for here are the major conclusions of the entire study. Thus it is said that "If the price levels in England and the United States had been less sensitive than the prices in other countries, the cyclical fluctuations in gold flows found here could be explained along the lines of the classical theory." The chief defect with the classical explanation ". . . is that the lower price levels in prosperity in 'older' nations, which are also creditor nations, would lead to specie imports if price levels govern the situation, but would be consistent with specie exports, if there was a large volume of international lending occurring." Dr. Beach holds that dependence cannot be placed upon an insensitive price structure as the explanation for the cyclical gold movements found for England.

A problem is presented by the fact that in a given situation borrowing operations might tend to bring gold in to offset specie exports due to relatively high prices. At any rate, "The evidence found in this study points to very important cyclical variations in specie movements, and it seems probable that the frictional element in the economic system are more important than the classical writers have admitted." Incidentally, it is remarked that standard money currencies are expensive because of their effects in ". . . upsetting the economic systems of other countries." The author is disposed to think that movements of foreign balances constitute a better explanation of cyclical gold movements in the United States and England than price level differences. Finally, it is observed that in a world where internal price structures are rigid, the easiest method of curbing the unfortunate influence of movements of short-term balances ". . . is to set up conditions which make the latter more insensitive to rate changes," and some such mechanism is essential, if the international gold standard is to be effective for cyclical periods.

This review has attempted to bring out the fact that Dr. Beach has really analyzed the working of the international gold standard in the light of the influence of economic friction. The objective first set up by Dr. Young suggested the presence of elements of friction as a possible explanation of the problem raised by him. These elements of friction have been found in a study of the data and their relationship to events has been established in a way which is enlightening to those who have always wanted to know precisely how automatic the gold standard in its heyday actually was and why. Dr. Beach has done much to show that, from the point of view of behavior, it departed from theory significantly because of friction. It should be added that he has also thrown light upon the question of the stability of capitalism in the presence of frictions. The volume is rounded out with two appendices and a bibliography.

E. A. Kincaid

University of Virginia

Money and Banking. Horace White. Revised and enlarged by Charles S. Tippetts and Lewis A. Fromand. (Boston: Ginn & Co. 1935. Pp. xiv, 808.)

Horace White's Money and Banking has long been recognized as a pioneer work of so much merit that it has come to be regarded as a classic. The authors of this new edition were quite aware of this, but they were also confronted with the necessity of a considerable revision if the old book was to retain its one-time popularity as a text for college courses. Evidently the problem confronting them was not simple, for we find them saying, "In many ways it would have been easier, perhaps, to write a completely new volume." Accordingly, the result of their labors is a compromise whereby "Probably one-third of the book remains as Mr. White left it in his last revision in 1914." But there still remained the problem of major conclusions reached by Mr. White and of this the authors say, "We have . . . endeavored not to modify (them) in any drastic manner." However, ". . . Mr. White was an advocate of 'hard money,' and ardent believer in the gold standard, and the soundest of sound-money men. Because we do not feel quite so certain or confident as he regarding the meaning of 'sound' money and how to secure it, we hope that were he alive today he would not be too critical of what we have done." This frank statement of the authors leads one to expect a text that reveals the evolution of monetary thought in the years since 1914 and that expectation is fully realized.

The authors provide two suitable introductory chapters, "The Nature and Evolution of Money" and "The

Functions and Characteristics of Money" and then wisely include Mr. White's excellent chapter on "Colonial and Revolutionary Bills of Credit," thereby giving the book one of its outstanding qualities, namely, an excellent historical ground work for money and banking as we know it today. The chapter on "Gold Mining and Production" adds materially to the value of the text and the two following chapters on "Monetary Standards" clearly explain the essentials of gold and other monetary standards. The place of bank notes in a monetary system is well treated and then comes "Prices and the Value of Money" in the course of which a decidedly friendly interpretation of the quantity theory of money is presented. Indeed, as presented, the Fisherian approach is made to account for short-term changes in the value of money. But careful consideration of the treatment leaves one with the impression that the obstacles involved have been rather too easily overcome, for some of the most telling criticisms of that approach have been overlooked.[1]

Chapters IX to XI, "The Greenbacks and Confederate Currency," "After the Civil War" and "Silver Dollars and the Panic of 1893" are also included in the form in which Mr. White left them, thereby providing additional historical background of much value to the student. However, the latter chapter would have been strengthened, if the authors had added material (p. 283) showing just what terminated the Panic of 1895. The three chapters, XII to XIV, treating "Foreign-Exchange Rates," "Financing International Trade" and "The Balance of International Payments" satisfactorily present the essentials of that phase of the subject matter and the authors then pass to the "Functions of a Bank," wherein they refer to a bank in the modern sense as "... a manufactory of credit ...." (p. 326) This is rather unfortunate since it leaves the student with the idea that banks create credit out of the air, unless the instructor is careful to explain the nature of the materials from which credit is manufactured, thereby making it clear that banks do no more than recognize credit already manufactured or in process. There is also a chapter on "The Bank Statement" which adds nothing to the conventional and inadequate treatment usually accorded this subject.

Chapters XVIII–XXI, covering "Colonial Banking and Early American Banks," "The First and Second Banks of the United States," "Making the Bank Note Safe" and "Banking Chaos and Some Notable Banks in the Nineteenth Century" are wisely included in practically the form in which Mr. White wrote them. Chapter XXII, "The National Banking System," includes Mr. White's chapter on "The Panic of 1907," a happy combination. Chapters XXIII to XXX, inclusive, are the work of the authors of the new edition and it is chiefly by means of these chapters that the book is brought up to date. On the whole they are exceptionally well done, though one might take exception to certain statements here and there. Thus it is said (p. 544) that by means of the Glass-Steagall Act, "The Federal reserve note was ... kept as an elastic currency in spite of the dearth of commercial paper." Very true, if "elastic" is given a meaning quite different from the intention of the original reserve act. In addition, the remarks (p. 557) respecting open market operations are not in line with the Banking Act of 1935. The authors also fail to bring out the relative ineffectiveness of the rediscount rate (p. 579) as an instrument of credit policy. But, they added much to the value of the text by including an entire chapter on "The Security Market," including therein an excellent analysis of the extent of the responsibility of the Federal reserve for the stock market boom.

"Bank Failures and Banking Concentration" also adds much to the value of the text, but perhaps it should be remarked that the error of other writers is repeated to the effect that state-wide branch banking is permitted in Virginia. The treatment of branch, chain and group banking effectively brings out the growing importance of these developments. Thus it is shown that "Since 1927 branch systems have been doing about one-half of our banking business." Moreover, at the close of 1931 "... group and chain banking systems possessed 25 per cent of the loans and investments of all commercial banks ...." The conclusion of the discussion on bank failures contains the observation that "The failure record ... during the last twelve years conclusively proves that we must revise our system." (p. 693) Chapter XXX, "Recent Monetary and Banking Legislation" provides a useful brief analysis of legislation since the formation of the National Credit Corporation in 1931 up to and including the National Housing Act of June 27, 1934. It is unfortunate that the publication of the book could not be sufficiently delayed to permit inclusion of the Banking Act of 1935. It is not apparent from the discussion of the Bank of France (p. 753) that the Bank no longer reserves the right to redeem its notes in silver.[2] Most teachers will be grateful for the inclusion of material on the new Bank of Canada.

When allowance is made for the difficulties confronting them, one must conclude that the authors of the new edition have done their work very well indeed and that they are entitled to an expression of appreciation for preserving so much of the work of Mr. White in a text that will continue his traditional position among the contributors to the literature of money and banking.

E. A. Kincaid

University of Virginia

Financial Reports for Colleges and Universities. The National Committee on Standard Reports for Institutions of Higher Education. (Chicago: The University of Chicago Press, 1935. Pp. xiv, 285. $3.00.)

Since Luca Pacioli's treatise on double entry bookkeeping was printed in Venice in 1494, the development of accounting methods and principles has kept pace to a certain extent with the growth of commerce and industry. Unfortunately the characteristics and functions of educational institutions differ so widely from those

[1] Mitchell, *Business Cycles The Problem and Its Setting*, 128–132.

[2] Madden and Nadler, *International Money Markets*, p. 314.

of commercial concerns that in many instances the practices of private business cannot be followed in institutional accounting.

A system of accounts and financial reports for colleges and universities should provide for:

1. The keeping of fund accounts to present a proper picture of the financial condition and operations of the institution, and the limitations attached to the endowments and grants under which institutions of higher education operate.
2. Budgetary control to limit expenditures to available income.
3. The accumulation of data required by various accrediting, statistical and regulatory bodies.

These requirements can be met only in an accounting system based upon principles peculiar to educational institutions.

It is explained in the preface to this volume that, "The National Committee on Standard Reports for Institutions of Higher Education was organized in 1930 for the purpose of formulating principles to be followed in the preparation of financial and statistical reports of universities and colleges and of securing the acceptance and adoption of those principles. The committee's object was to achieve general uniformity in reports required for institutional purposes and by federal, state and municipal governments, various accrediting agencies, and other central statistical and controlling bodies."

This volume, which is the final report of the Committee, has been edited by a sub-committee consisting of J. C. Christensen; E. S. Erwin; and Lloyd Morey with the assistance of George E. Van Dyke, Technical Secretary.

The subject matter includes one hundred and thirteen (113) model forms for statements required in annual reports, or for internal use, unit cost computations and enrollment reports. A chart of accounts and definitions of expenditure classifications are also presented. While no attempt is made to outline accounting procedures, the principles involved in the preparations of the various statements are explained and each form is described in detail.

The forms are adaptable to various types of institutions and should be valuable to all who are interested in institutional accounting. The Committee is to be commended for its comprehensive studies and its program of acquainting the principal educational accounting associations with its work.

R. F. Graham

Reconstruction Finance Corporation

Accounting. Charles H. Porter and Wyman P. Fiske. (New York: Henry Holt and Company, 1935. Pp. xi, 631. $3.75.)

The authors have prepared this text to meet the needs of the large body of students who include only a limited amount of accounting in their course of study and who are interested in the subject because of its importance as a tool of management or because of its place in investment analysis. The selection of topics and the degree of emphasis has been governed by the authors' concept of the relative importance of the topics in relation to the needs of such students. As a result, the text reflects a conscious limitation on the discussion of bookkeeping aspects of the topics considered and a more extensive discussion of problems and principles to illustrate the use of accounting analysis. In the selection of topics the text includes some which are usually covered in advanced courses while some topics usually developed at considerable length in an introductory text are given a brief discussion.

In the effort to cover the material of the usual introductory text and also to include the more advanced topics the discussion tends to be concise. The student is not led gently but is propelled rapidly. In this respect the text is better adapted to upper class students or to selected students of relatively high ability.

The first part of the text consists of four introductory chapters in which there is a discussion of the field of accounting, some underlying concepts, accounting reports, and the analysis of transactions in relation to assets, liabilities and net worth. While the approach is similar to that found in most texts it includes topics usually deferred. To illustrate, the introduction to accounting reports includes a manufacturing statement, a reconciliation of surplus with four different types of deductions, and reports for operating and financial control.

In the second part are found three chapters covering the recording of transactions and the preparation of financial statements. Presentation of the different types of columnar journals including the voucher register, the ledger with controlling accounts and subsidiary ledgers, the recording of a variety of transactions, and the posting procedure are all compressed into two chapters. The other chapter covers adjustments, inventories, worksheets, closing entries, and preparation of statements. The discussion is related to both trading and manufacturing concerns. Outside of these three chapters there is very little further reference to bookkeeping procedure.

Part III includes three chapters on the form and content of financial statements. A number of well selected statements taken from the reports of corporations are presented as illustrations. The last of the three chapters is given to consolidated statements.

Ten chapters constitute Part IV under the general title of problems of income and valuation. This large portion of the text indicates the relative importance of these problems as viewed by the authors. Most of the material in this section is usually found in texts for advanced courses.

Part V consists of the final chapter in which the analysis of financial statements is presented.

The problem material is adapted to the purpose of the text. Bookkeeping aspects of problems are minimized while analysis of data and interpretation of results are emphasized. The problems are numerous and stimulating. Two brief practice set problems are found in appendix A. Some interest tables are available in appendix B and some bond tables in appendix C.

The material in the text was tested by the authors in the classroom for several years and revised constantly. It is carefully written and should serve well

the purpose for which it was prepared. Instructors in accounting are constantly confronted with the problem of determining the extent to which the ability to analyze and interpret accounting data is dependent upon familiarity with accounting technique. The solution of the problem must involve variables such as the maturity and ability of the students and the type and extent of analysis desired. The text should prove well adapted to the needs of mature capable students and of men who are now employed in business positions. The study of this text will not enable such students to anticipate many phases of accounting analysis and interpretation which are revealed by complicated problems involving transactions and techniques with which they are not familiar, but it should make them alert to the importance of the analysis and the necessity of further study of the accounting aspects of the problems with which they are confronted.

William J. Burney

University of Iowa

Training for the Public Service. Morris B. Lambie. (Chicago: Public Administration Clearing House, 1935. Pp. xiv, 49. 50¢.)

A small group of men have been interested for many years in a more efficient public service. The events of the last few years have extended and intensified this interest and thus the "ill wind" has blown some good. Many colleges are announcing programs of training for public service while many institutes and schools are being arranged. It is in times of stress that we get interested in greater economy and efficiency in the conduct of our public affairs.

The content of Professor Lambie's contribution is largely a result of a conference held in Princeton, New Jersey, June 22–24, 1935. Recognition is given to two possible types of training, (a) pre-entry academic preparation and (b) in-service or post-entry training. The report and recommendations as presented by Professor Lambie are built around these two aspects. To read them will educate one as to what is being done and as to what can be done towards a more adequate preparation for those in the public service.

The report does not go into details as to training, such as the recommendation of particular courses to be taken in college. In a perusal of the general requirements as set forth, however, the accountant will recognize that he must assume a large share in the proper training of our public servants.

M. H. Hunter

University of Illinois

Analysis of Financial Statements. Revised Edition. H. G. Guthman. (New York: Prentice-Hall, Inc., 1935, Pp. xv, 584. $5.)

In this edition the same general outline was used as in the original. For the most part the same headings of the chapter sub-sections have been retained. The revision consists largely of rearrangement and enrichment of the subject matter and bringing the material up to date. One hundred thirty pages have been added and the appearance of the volume is superior to that of the first edition.

Arthur W. Hanson

Harvard Graduate School of Business Administration

UNIVERSITY NOTES

Denver University

Professor W. B. Paul of the Accounting Department has been reelected president of the Colorado Society of Certified Public Accountants.

Hardin-Simmons University

Professor Wiley Daniel Rich, head of the department of business administration, received his Ph.D. degree from Columbia University in January, 1936. His doctoral dissertation, *Legal Responsibilities and Rights of Public Accountants*, has been published by the American Institute Publishing Co., Inc.

Indiana University

Mr. D. Lyle Dieterle (C.P.A. Ill.), from Washington D. C., is joining the staff as assistant professor of accounting.

Dean William A. Rawles has resigned as Dean of the School of Business Administration. Mr. Herman B. Wells has been appointed dean. Professor Wells comes to the school with a background of both academic training and of business experience. His field of activity will be banking and finance.

University of Kansas

Professor Leslie T. Tupy's leave of absence has been extended for another year. Mr. Tupy has resigned his position as Security Commissioner for the state and has been appointed special counsel and accountant for the Kansas Corporation Commission.

Mr. Malcolm Stuart has been appointed assistant in economics. Mr. Wm. Shannon is developing a new text in elementary accounting which he is using this year in mimeographed form.

The rules of the C.P.A. board have been amended so that after 1940 two years of college work will be required to qualify for the examination. Also the experience requirement may be satisfied either before or after sitting for the examination.

Marquette University

Mr. Leo C. Schmidt, C.P.A., has been promoted to the rank of professor of accounting. Mr. Schmidt is revising his text-book "Mechanics of Accounting."

Students majoring in accounting and recent alumni have organized the Marquette University Accounting Club with membership on the basis of scholarship and professional interest.

University of Missouri

Dr. Frederick A. Middlebush, former Dean of the School of Business and Public Administration and Acting President of the University of Missouri has been appointed President of the University. Professor Harry Gunnison Brown of the department of economics is at present acting as dean.

Dr. Russell S. Bauder, associate professor of economics, is returning in February after spending a year and a half as associate director of the Missouri State Reemployment Service.

University of Montana

President George F. Simmons, who assumed his duties as President in September, will be formally inaugurated on February 17.

Professor A. S. Merrill of the mathematics department is preparing depreciation tables for the fixed percentage of diminishing value method which will make it possible to refer to the table for exact rates to be used in all cases.

College of the City of New York

Professor George M. Brett, head of the department of accountancy and curator of the college, has been granted leave of absence for the second semester and left for Europe early in February. Mr. L. M. Sexton, associate professor of accountancy, has been appointed acting head of the department during his absence.

Mr. John R. Byers has been advanced to the rank of instructor and Mr. E. I. Fjeld to that of assistant professor.

During the fall semester there were 4,100 students registered in the accounting courses, 116[illegible] in the day session and 2,938 in the evening. The number of accounting courses offered are 34, of which 20 were given in the fall semester. Instructors on the staff number 68.

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